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Thomas A. Edison Papers

A SELECTIVE MICROFILM EDITION

PART II
(1879–1886)

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1987

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Thomas A. Edison Papers
at
Rutgers, The State University
endorsed by
National Historical Publications and Records Commission
18 June 1981

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The original documents in this edition are from the archive at the Edison National Historic Site at West Orange, New Jersey.

THOMAS A. EDISON PAPERS

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START

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THOMAS A. EDISON PAPERS

A SELECTIVE MICROFILM EDITION
PART II
(1879-1886)

REEL 69

DOCUMENT FILE SERIES (DOC-29)

D-83-043 through D-83-056
("Electric Light - Thomas A. Edison Construction Department - Engineering" through
"Electric Light - Thomas A. Edison Construction Department - Stations - Ohio - Tiffin")

1883. Electric Light - Thomas A. Edison Construction Department - Engineering (D-83-043)

This folder contains correspondence and other documents relating to the construction and installation of central stations. Most of the documents deal with technical problems, for which the engineering department had responsiblity. There is also some material concerning the ordering of supplies. Documents pertaining to the engineering problems of one specific station can be found in the folder for that station. Many of the documents in this folder are by William S. Andrews, chief electrical engineer; Frank J. Sprague, electrical consultant; W. D. Rich, superintendent of construction; and Thomas P. Conant, wireman and technician. Many of the letters by Andrews are partially illegible due to water damage. Some of Rich's correspondence is also faint and may be difficult to read. Among the undated items at the end of the folder are a series of questions and answers pertaining to steam boilers, engines, and meters, which were designed to be given to prospective employees. A related set of questions and answers can be found in the Company Records Series.

Approximately 80 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence regarding orders and employee expenses; duplicate copies of selected documents.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
296	NW	Cpaid	319

Received at 791 BROADWAY.

Dated Sunbury Pa 25 May 25 1886-3

Pam Insull

65 Fifth Ave.

Advice already sent Brockton Estimate tonight

W D Rich

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

43.

May 25. 1883

W. D. Rich

tele. to

Farrel & Mull

advice already

sent Brockton

estimate to night

1883-05-26

Form No. 1.

RECEIVED

THE WESTERN UNION TELEGRAPH COMPANY.

ANSWERED

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of this message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an UNREPEATED MESSAGE and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager.

NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK	FILE No.
300	C	Dy	10 Pd		317

852 BROADWAY.

Received at **791 BROADWAY.**

Dated, Sunbury Pa May 26 188

To Saml Insull

65 fifth ave

Cost of Brocton Building four thousand and sixty two dolla

RECEIVED MAY 28 1883 ANSWERED

W. D. Rich

.....188...

FILE No.....

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-05-29

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
18	C	D	Paid	1300

Received at 852 BROADWAY.

May 29 1888.

Dated Sunbury Pa 29

To Saml Insull

No 65 Fifth Ave

Will be in Nif tomorrow

at Ten Am

A D Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-06-08 18

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
160	Co	Dy	10 Pd	114x

Received at 852 BROADWAY.

Dated North Adams Mass June 8 1882.

To T. A. Edison

65 - 5 Ave

New York Saturday Morning

I am feeling Local temper

Concerning Central Station

F. J. Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-06-08

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
499	Dbn	W.	13 Pd	828

Received at ~~791~~ 852 BROADWAY.

Dated Brockton Mass 8 June 8 1882.

To Samel Insull 65 - 5 Ave

Shall be in New York tuesday

morning will go to Sunbury on

night Train

W D Rich

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

1883-06-21

~~NEW-YORK, 188~~

$200.00 Forwarded June 27/83

Danbury 6/21/83

Dear Sir

your favor of the 20th to hand contents noted in reply would say I shall leave here as soon as I receive advice from my foreman at Boston that the Material is delivered ready for set the Machines at work (Please see that the Machines is forwarded by the 1st of July) – the Station here will be left in charge of the Machinist who will be at work – Please send check for two (2) hundred Dollars for Labor and freight Disbursement for the week – will you kindly see that the Premium on Insured Policy notice is Paper before the 24th inst Charge the same to my a/c & Oblige yours Truly

Thos A Edison

Mr Jos Jackson
New York

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
75	Co	Dy	10 Pd	950

Received at 791 BROADWAY

Dated, June 25 1882

To Thos A. Edison

65-5 ave

Will Be down tuesday morning unless receiving wood Required tonight

F. J. Sprague

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
24	Nr Sl	92	Paid Nite 3 E

Received at the WESTERN UNION BUILDING, 195 Broadway, New York. Jun 1880

Dated Montreal

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

Have him [illegible] "ROAD MERCHANTS UNION EXPRESS VIA CORNING"

[illegible] NIGHT MESSAGE

Governors Island Llewellyn Park Saint Louis

Campbell should be able to give Lizé of

Cuillings. Be sure King starts helping

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
27			2

Received at the WESTERN UNION BUILDING, 195 Broadway, New York. 1880

Dated Campbell on Saint Louis plans Early Monday hurry

To Dodge on Utica & Haverville Mass if Eric Canvass

Comes in see it goes to Dodge immediately

hurry Bergmann on Balance Sunbury Material also

ask him Ship immediately all Shamokin Material

ask Ansonia Company about balance Shamokin wire

also P if they can supply portion of Louisville

Form No. 44.

NIGHT MESSAGE. (1883)

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.
This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
21			(3)

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, 1883

Dated

To Fair Wire before third July —

Insull

St Lawrence Hall Hotel

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
74	C	by 7pd	947

852 BROADWAY.

Received at **791 BROADWAY.**

Dated, Boston Mass 3 July 3 1882

To Saml Insull

No 65 - 5 AM

Will be in newyork at five pm

W. D. Rich

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-07-03

Pennsylvania Rail Road Co.

New York Division.

Office of Superintendent.

R. E. Pitt.
Supt

Jersey City, N.J. July 3 1883.

Subject _____

T. A. Edison Esq
65 Fifth Avenue, N.Y.

Dear Sir:- Noting your inquiry in regard to form of examination which our locomotive engineer undergo. would say that we have no written set of questions covering the same but the men are examined by our Road Foreman of engines at Jersey City when they are assigned to their proper places. These questions refer to locomotives on the track, mode of cleaning, train rules, telegraph orders &c &c, which would hardly be applicable for the examination of engineers in charge of stationary machinery.

If you think proper however to send

1883-07-03

one of your young men over, I will refer him to Mr C. W. Thomas, Road Foreman Eng's, who may be able to give him information which could not be very well embodied in a letter.

Yours truly

Wm. E. Elliot.

Supt.

1883-07-05 Form H.

1

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

~~New York,~~ Sunbury July 5 1883

Mr. Samuel Insull.
65 Fifth Avenue
New York.

Dear Sir:

I have to acknowledge yours of the 3d inst. As near as I can remember, Mr. Bancroft stated to Mr. A. C. Houghton that a central station of either 4000 or 5000 16-candle lamps could be started in North Adams for $30000, and that the first year's receipts would pay this cost and leave a surplus. He may have been misunderstood. He afterwards revised his figures, with the request that the first could not be shown, but I do not know the sum:

1883-07-05 Form H.

2

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, 188

given for the second estimate. I doubt whether Mr. Houghton would wish to be quoted.

If the gentlemen I left to feel interested in a local company, I will mention the following:

✓ L. L. Brown - President. } Firemen's Ins. Co.
✓ W. L. Brown. Treasurer
✓ John Bracewell Agent.
✓ C. T. Sampson. Shoe Mfr.
✓ E. L. Wilkinson. Cashier Nat. Bank.
✓ Wm Johnson. Johnson Mfg. Co.
✓ A. C. Houghton. Manager of Arnold Works.
✓ H. T. Cady. Shoe Mfr.
✓ H. G. Fisher. } Woolen Mfrs.
✓ Sanford Blackington.
✓ W. Brayton. Bank director.
✓ Geo. W. Crowley. Intro-gyanin & water Mfg.

& others.

1883-07-05 Form H.

3

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

I also hope to interest prominent men in the south village, Messrs. Renfrew, Chalmers, and Brown of the Renfrew Mfg. Co.

Of the men in North Adams, I should avoid the Messrs. Richardson, Pres. and Treas. of the Gas Co, and Will Richmond, a gas man. The Richardson policy has enabled Houghton & others to drive gas out of the streets, and neither Richardson's or Richmond's name would add to the strength of the Co. Were they to have a managing interest, electric light interests would be sacrificed to gas interests. Gas is at present $3.00 a thousand - small reduction to large consumers, but an increase where paid

1883-07-05 Form H.

4

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

in the dark. Houghton would not work with Richmond or Richardson, to both of whom he is opposed. He is energetic and hopeful, has an "L" in his works, but would require men like W. L. Brown, and Johnson, to go with him - The treasurer of the Freeman Mfg. Co, W. L. Brown, has requested me to tender for lighting their works, Paul having failed to do anything - and I anticipate another like request.

Very truly yours,

F. J. Sprague

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
139	HJW	12 Jad	1276

Received at 852 BROADWAY 791 BROADWAY.

July 14 1882 3

Dated, Brockton mass 14

To Sand Insull 65 fifth ave

There is no truth in their statement. shall come to newyork tonight

Dick

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

44

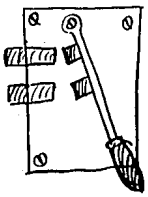
July 14th 83

Mrs Rich

to

S. Cornell

1883-07-20



I should like the switch boards made square like this, instead of having them as they are here thus: They would take up less room and have a better appearance.

W. S. Andrews

July 20/83

1883-07-30

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
B 240	m	y	44 Pd

Received at 3 West 23rd Street. July 30 1883.

Dated Shamokin Pa 30

To Saml Insull

65 Fifth ave

Boilers ready to fire up tomorrow night. Brick work on Buildings done on Monday everything done at Sunbury tomorrow will be in Newyork on Tuesday am sending Check to Sunbury one

THIS TELEGRAM HAS JUST BEEN RECEIVED AT THE OFFICE IN

CABLE OFFICE. **3 West 23rd Street.** ALWAYS OPEN.

1883-07-30

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK

Received at 3 West 23rd Street. 1883.

Dated

To

hundred & fifty dollars quick Johnson & gang all here this am

W D Rich

THIS TELEGRAM HAS JUST BEEN RECEIVED AT THE OFFICE IN

CABLE OFFICE. **3 West 23rd Street.** ALWAYS OPEN.

1883-07-30

Note

Since it is desirable that there should be a similarity of direction in the handles of main and field switches that is both should be to the left or both to right, the connection to either the main or field switch should be reversed - but only in one -

Let connection on main switch -

Otherwise everything satisfactory - Do not think there is any danger in breaking an 14 field

Would suggest a locking main & field switch for your dynamo, such that the field could only be made or broken when the main is open -

Respectfully -

F J Sprague

July 30 -

Mr T A Edison

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

1883-07-31 Form M.

W. D. RICH,
SUP'T OF CONSTRUCTION.

[illegible] 188[illegible]

Address reply to [illegible]

[illegible]

Dear Sir

Yours from of the [illegible] inst. came to hand last Monday ([illegible]) containing cheque for [illegible] for Disbursements at Brockton (Mass.) also blue print of Dynamo foundation — This day I have received from the South [illegible] I will then say that I am ready to go to Business as soon as I receive the State [illegible] a copy of which you sent to me the [illegible] day after I [illegible] at the Office — Send it along and I will go at once I can commence work there at any time when the Machinery is on the spot. (Push it along) in relation to my Pension I will say send along the papers and I will have them put in the Station or do any thing to push matters along — Also find inclosed Ralph Mr Williams Bill which I find Correct also Also find a Circular of Exhaust Steam Injector

The boys Down Town are working in Boston and are well pleased with it after thoroughly examining it am satisfied it will be all they claim for it and if you think best will place one in these Buildings [illegible] advise me by return mail — I have not written from you in relation to fixing the Post which I wrote you about —

1883-07-31 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

.....188

Address reply to.....

[illegible] to [illegible] you — as they have [illegible] [illegible] [illegible] able to advise them [illegible] [illegible] [illegible]

1883-08-03

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Port Huron Aug 3rd 1883

Address reply to

Dear Sir

Your favor of July 31st at hand contents noted

in reply would say that I think of putting that your case before me at Sunbury on Thursday - the electricians can compare the list at next week if the Dynamos are shipped - I will then advise - I shall go to Tamaqua on Monday next - then hurry matters up and will see that I have the Bluhoff Pump with the Boiler matter is then any trouble on the light of pieces - Also send those also one latch for side closing Doors as one was broken in shipping - matter Engine on Bed Plate has arrived safe -

[illegible] expenses for material

Very Truly yours
W. D. Rich
Supt

Mr Samuel Insull
[illegible] 65 Fifth Ave New York

P.S. Did you order some quarts & two Eight Rounds with the Dip from the Rust Mfg Co - write them with the Dept - I have that there matter there -

W. D. R.

File

45

August 3rd 83

M. S. Rich

Re- Enclosing requisitions for Material &c

1883-08-04

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Newchatten Aug 4th 1883

Address reply to.....

Dear Sir

[illegible] Yours of the 3rd came duly to hand [illegible] relative to Disbursements of cash for [illegible] all of the Central Station plants I will [illegible] charge of [illegible] Incidental Expenses. [illegible] the [illegible] expense consist of car fare — Telegrams — Postage Stamps — Messenger & other Small Bills for which there is no vouchers therefor. I will comply with your request —

No Charge has been received this day for labor direct in a Serious Inconvenience

No Engine or Boiler [illegible] received

Very Truly Yours
W. D. Rich

File

August 4th/83
W. D. Rich
Re- Petty
Accounts

1883-08-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Aug 6th 1883

Thos. A. Edison Esq
65 Fifth Ave New York City

Dear Sir —

I enclose with this letter, my latest plan for connecting in a third dynamo so that it may work either as a supplementary to A or B. or take the place of either in case of a breakdown —

This plan of connecting, cancels all former ones in which there existed a savage bug — In last plan I sent, Dynamo A was made to supply current to the field of spare dynamo, when the latter was working in conjunction with Dynamo B. or taking the place of B in case of B's breaking down, and on the other hand Dynamo B was made to supply current to field of spare in case of A's breaking down or requiring help —

It is needless for me to enter into an explanation to you of the great mistake of this arrangement, for you will readily perceive that the express purpose for which a Bank of resistance is used with two Dynamos running in Multiple arc is hereby made purposeless when one of these said dynamos has its field charged by another independent dynamo, having perhaps a different E.M.F. – In running dynamos in a three wire system, where a spare dynamo is used, I think it is obvious that each machine must supply its own field, and in order to throw the spare one on either side, there must be a double main switch arranged according to sketch. The spare dynamo thus will always charge its own field in the same direction

1883-08-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

when the plug of its resistance box is put in, whether the main switch on head-board of said dynamo is closed or not. The double main switch is always kept open when spare dynamo is not in use. To throw it in on either A or B. side, first put in either A or B. resistance plug, then when it has fully charged its field close double main switch either to right or left accordingly — If the levers of the double switch were to be closed in opposite directions, a dead short circuit would of course result — I therefore put a lever across from one lever to the other which renders it only possible to move

them both together in one direction ~~on the other~~
This last arrangement does away with
all field switches, but makes a
double main switch necessary — In
using the main switches already made
I can easily arrange and construct a
tie-piece myself, but in making
them in future, I think it would
be best for Benjamin to make
them double on one board —
I have two spare large main switches
here in Sunbury which you said
I could take on and use in Shamokin
They will answer first rate — Please
say if I shall use them thus
And find all the fault you can
with this last arrangement for what to get at bottom facts in the matter —
The list of Instruments, Switches &c
that I sent you some time ago
is all right

5

1883-08-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

only substituting another main switch for the faulty switch therein mentioned —

The list of questions came to hand this evening — I will try and answer them tomorrow —

Please do not let Bergmann forget to express at once the two pressure indicators which he did not give to Mr Insull —

Yours truly

Wm. P. Andrews

Sunbury Aug 7 /83

Thomas A. Edison Esq
Dear Sir.

Yours of Aug. 4th with inclosed questions received. Will send answers as soon as possible.

Yours of Aug 3rd with regard to Salary also received.

Yrs &c
Thomas P. Lonergan

1883-08-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Referred to Andrews — to make drawing to scale of his switch for Shoemaker so one

New York, ~~Aug 7~~ 188 3

Dear Sir: Can have it made — Edison

Referring to Mr. Andrews diagram, referred to me for comment, I have to say that I strongly favor the use the the double main switch proposed.

The reasons are:

1° The dynamo excites itself, and no engineer would, after instruction, close the main switch before his engine was running, and by the time the brushes were set down, the field would be excited.

2° The direction of the current in the armature in the dynamo is always the same.

3° The direction of the current in the field of the dynamo is always the same

thus doing away with the

1883-08-07

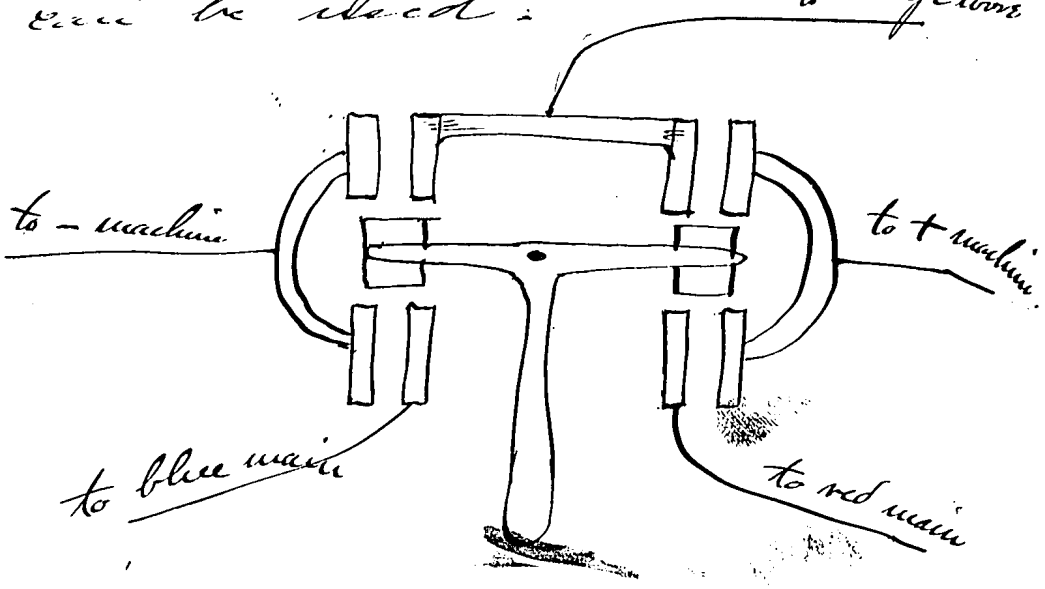
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

necessity of reversing the polarity.

I would suggest the joining of the main marked, E E. together so that there will be necessary but one coupling of the bridge wire. If desirable to have one movable part to the switch, that is, one handle, the following arrangement can be used:



1883-08-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

This is the same principle, but may be more compact.

With reference to a "breakdown" switch, I have to instance a case of its use. Suppose one armature to be out for repair, then the spare is in use, and you are reduced to two dynamos, with no spare one to throw in.

With a medium load, some accident might happen to one of the machines, which would make it necessary to stop it, and at the same time throw the load on the single machine in simple multiple circuit.

For this purpose it is many

1883-08-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

to connect the red and black mains across as dotted. This connecting switch may be either lever or plug, will cost little, and may sometimes be of great use. It is, of course separate from the space dynamo switch, and must be independent of it.

Yours, &c,

F. J. Sprague

1883-08-08

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Form L.

~~New York~~ Sunbury, Aug 8th 1883

Saml. Insull Esq.
65 Fifth Ave New York

Dear Sir,

You asked me the other day whom I would like to help me at Shamokin Central Station, if Doubleday could not be spared from Louisville – Let me have Doubleday if possible, otherwise I should like to have Kerby who is a steady and reliable man

Our Engineer's first month was up on Sunday, Aug 5th/83 (including that day) His name is William Bateman

The inter-man's first month will be up on Wednesday, Aug 15/83 (including that day) His name is Sydney Bateman
I will enclose the Coal bill for July—, and will send oil-bill in next letter.

The engineer will this day finish wrapping the steam pipe with asbestos and felt—

I have just now shipped by Philada & Reading R. R—1 Case Containing the various resistance Coils and two small brass steam Valves also two (2) large iron steam Valves and shall mail to Bergmann the bills of lading. Goods are add as usual— Enclosed find my Exp Acct for week ending July 14/83 as per request of yesterday's favor Yours very truly Wm L Andrews

1883-08-21

Forwarding his reference to Mr Rich —

E. Cauff. 21. 1883

RECEIVED AUG 21 1883 ANSWERED

FILE NO.

Please send me Doubleday's address Louisville — He took away a saw belonging to me by mistake and I want to write to him about it

W. S. A.

4-6

August 8th 1883

W. Andrews -

Re Sunbury Plank

[INCOMPLETE]

1883-08-08

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

~~New York~~, ... 188

There is one 6 light meter, yet to be placed for Ed. Hilman who has two lights. He has however gone out of town and shut up his shop so that we can not get in. All the other places connected are supplied with meters and bottles.

Yours &c

Thomas P. Conroy.

[INCOMPLETE]

45

August 8th/83

Thos P. Conant

re Giving names of parties to whom meters have been put in

1883-08-09

Central Station
Sunbury
Aug 9/83

Thos. A. Edison Esq
65 Fifth Ave New York

Dear Sir,

I want to ask you something about Question 34 which I will quote:—

"Supposing there was but half a load on and you wanted to keep the lamps at the same candle power as they were when there was a full load on, would you keep the same pressure at the end of feeders as with a full load, or what would you do?"—

I find in practice that a lower pressure when there are only a few lamps on will keep these few lamps up to a normal candle power, but then if the pressure at end of feeders has to be varied with the load, how

1883-08-09

is the engineer to decide about his pressure unless he has an ampère meter on red & blue lines as well as on compensating lines? Please explain this to me —— He can tell roughly of course by position of neutral point on commutator but this does not seem to me to be sufficiently absolute —

I have measured the test wires on our system in Sunbury with the pressure indicators here and find that there is a drop of about 2 Volts on each pair, and I have to keep the indicators at 115 Volts when there is a full load on to get normal candle power. At about 11 or 12 o'clock P.M. when only the two Hotels are on, about 111 Volts only is necessary —

Yours very truly
W. S. Andrews —

1883-08-10

Oliver R. Drumheller, Thos. H. Hutchinson.

CITY HOTEL,

Corner Fourth and Market Streets,

DRUMHELLER, & HUTCHINSON,
PROPRIETORS.

Sunbury, Pa., ... 188

P.S. Please let me know when I am to go to Shamokin to attend to the Central Station there, and who I am to have to help me. As I said in former letter I would prefer Doubleday as he is a good quick workman with ideas, but in case he cannot come I should like to have Kirby

Yours Wm L. Snyder

1883-08-09

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Brooklyn Aug 9th 1883

Address reply to [illegible]

[illegible]

Dear Sir

[illegible] budget of [illegible] estimate [illegible] requires [illegible] to hand [illegible] & [illegible] to reply - in relation [illegible] [illegible] further [illegible] through the [illegible] - The [illegible] [illegible] of the [illegible] [illegible] - [illegible] [illegible] [illegible]

1883-08-09 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

.....188

Address reply to.....

[illegible] Edison also [illegible] [illegible]
[illegible] [illegible] that in S. I. [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] the new Pumping Engine House and Office
Have bid @ [illegible] for Five Hundred ($500.00) for
[illegible] Disturbance and Cellarage [illegible]

W. D. Rich

115

August 9th/83

W. D. Rich

Re-Shawnee Ks

enclosing Bills &

Vouchers

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
95			Paid

852 BROADWAY.

Received at **791 BROADWAY.** Aug 15 1882-3

Dated, Brockton Mass 15

To Saml Insull

Cor Sav

Will be at your office tomorrow morning

W L Rich

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
95			Paid

852 BROADWAY

Received at **791 BROADWAY.** Aug 15 1882-3

Dated, Auburn Pa 15

To Saml Insull

Cor Sav

Why don't you send Chicago I am greatly inconvenienced answer

M Andrews

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-08-16

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Sunbury ~~New York~~, Aug 16th 1883

Saml Insull Esq
New York

Dear Sir

I enclose two designs for Double Main Switches — In the Single Switches already shipped to Shamokin there is at extreme upper end of Lever, a small brass projection about 1/8 in diam carrying inside a spiral spring — I propose to screw up two of these Single Switches against wall of C. Station and connect the two levers together by putting a link of hard wood across, the ends of link

having holes bored in them to fit over the small brass projections aforementioned — I think this will be the neatest way to bring them in, and will moreover be very little trouble to do —

The two levers being linked together across the top must of course work together

Yours very truly

Wm S. Andrews

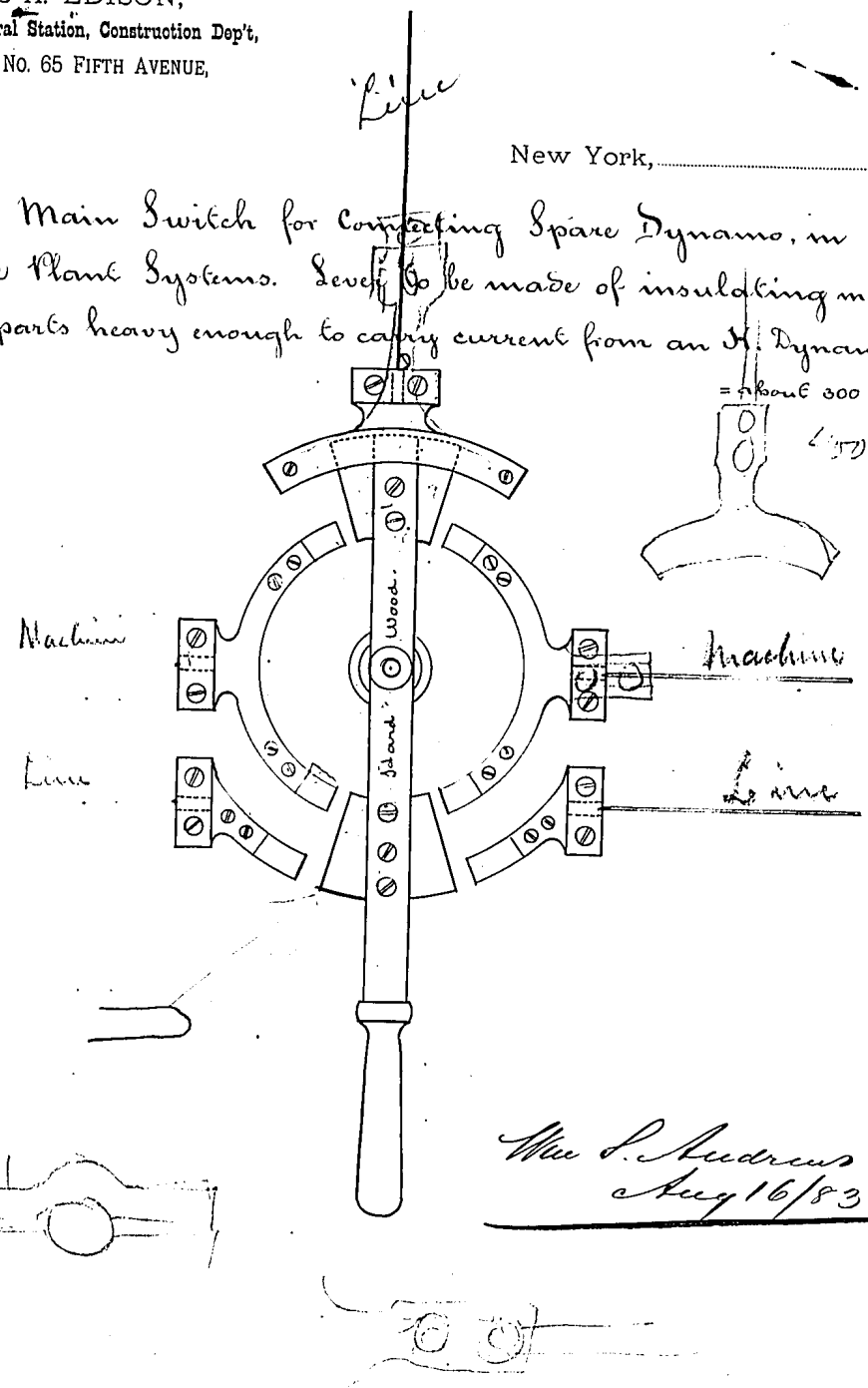
1883 08 16

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Double Main Switch for Connecting Spare Dynamo, in Village Plant Systems. Levers to be made of insulating material Metal parts heavy enough to carry current from an H Dynamo — = about 300 Amperes -



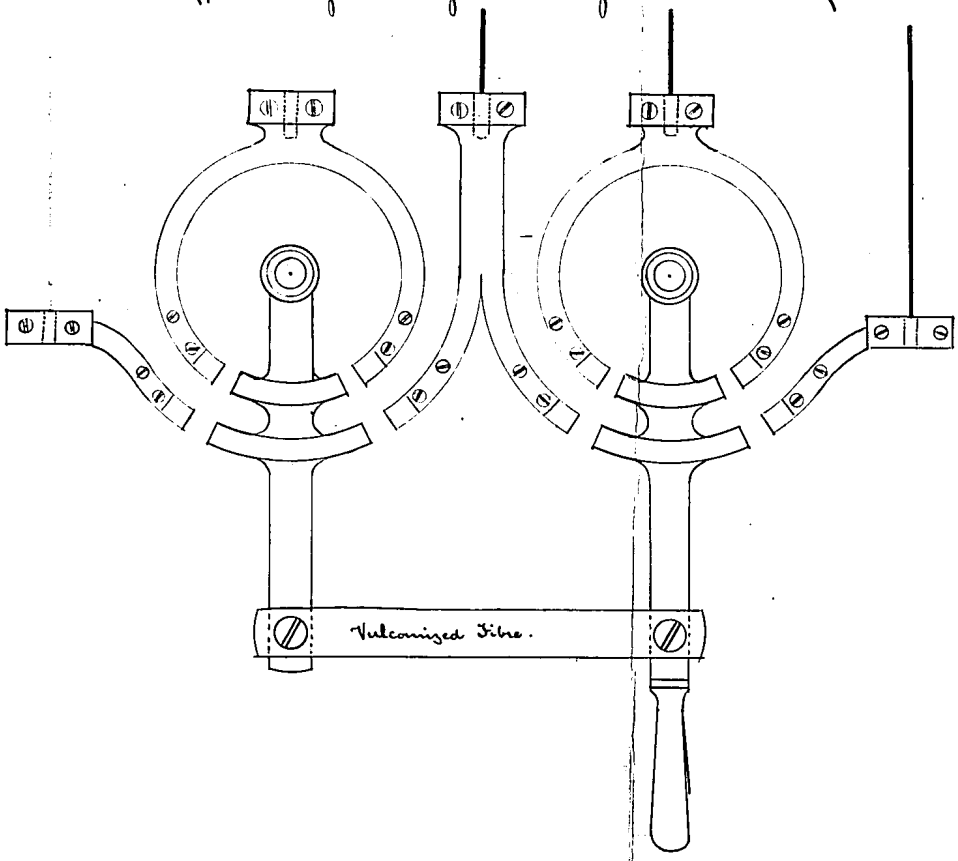
Wm S. Andrews
Aug 16/83

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

1883-08-16
Form L.

Double Main Switch for connecting in Spare Dynamo in Village Plant Stations.
To be made sufficiently heavy to carry the current from a DC Dynamo—



Wm. J. Meadows
Aug 16/83

1883-08-17

Form L.

THOMAS A. EDISON,
Central Station Construction Dep't,
No. 65 FIFTH AVENUE,

August 17th 1883
Wm Andrews
Mr Insull
Mr Blair

New York, Aug 17th 1883

Saml. Insull Esq
New York —

AUG 20
AUG 21 1883
FILE

Dear Sir,

Mr Marr desires that you will kindly send to Sunbury the necessary books for keeping the Central Station accounts. Our first meter bills were presented to seven consumers today, and I am happy to say that everyone was perfectly satisfied — Some said that the bills were lower than their gas bills, others said they were a little higher, but considering the extra quality and quantity of the light, no fault could be found, and all paid up promptly and cheerfully —

Your letter of yesterday's date to hand I note that Mr Sprague has struck nearly the same idea as myself in regard to the double main-switch. I did not give any measurements on my drawings, as the necessary heavyness of the castings depends in a large measure on the kind of metal used, and I thought that Mr Bergmann's experience in these matters would be a sufficient guide for him in ordering patterns However, if Mr Edison desires it I will make a drawing to size according to my judgement, if he will say which of the designs he thinks best adapted for Central Station work — I think the choice lies between Mr Sprague's square

3

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Andrews Circular Switch base but with holes for screw with T lever and my Circular one with straight lever to bolts like the Jackson switches I think that my Circular one is a trifle the neater of the two, but will Cordially doff my hat to Mr Sprague if Mr Edison likes his best. Both will work equally well — Am I to see to the re-shipping of the large single switches now at Shamokin? — I will return the two at Sunbury probably tomorrow Have been so busy for the last few days that I could not attend to them —

I went to Shamokin today

and saw Mr Rich, — From present appearances I judge that the Station will not be in order for me to commence work until Tuesday or Wednesday next — I shall go there again on Monday next, to look over all the works with Mr Johnson — He was too busy today to go round with me Please send me a copy of the Questions on Dynamos as soon as you can — I had no time to take a copy of them. I should also like a copy of revised or critiqued answers with questions, as I want to go over them carefully with our engineer

Yours very truly
Wm S. Andrews.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

ANSWERED 188
FILE NO.

~~New York~~ Sunbury, Aug 18th 1883

Saml Insull Esq
Newyork
Wood Pike
of New York

Dear Sir,

On the other side I send you a specimen of a Lamp Cap that I have got up and ruled, for use in Sunbury. Please let me know what you think of it. It is, as you see, simply designed to keep the Lamp Cap between Central Station & Consumer on Sunbury Co

Yours truly
N. S. Andrews

[ON BACK OF PRECEDING PAGE]

1883-08-18 FORM Z

J. Bond

Lamp Acc — 2767 Head only

Date of Installment	[redacted]	No. of Lamps in use		No. of Spare Lamps allowed	Broken lamps received							
		Red	Blue		July 1st	July 15th	August 1st	August 15th	September 1st	September 15th	October 1st	October 15th
1883												
July 4	[redacted]		19	12		5	1	3				
"	[redacted]	17		12		4	6	1				
" 10	Whitman & Scott		5	3								
	Chase & Koch	6		3		1	2	2				
" 12	H.B. Smith	10		6		1	2	3				
" 13	E.J. B. Smith		5	3			1					
"	J. Keithan		4	3		1	1	1				
20	St. Charles Hotel		6	3				1				
22	Wm Mann	6		3			5	2				
24	D Heim	7		3			1	2				
25	P.E.R.R. Tel. Office	8		6			3	3				

Wm Andrews
Discussion of Form
Account Form
Fig Windows
Aug. 15/88

[TO C. H. CAMPBELL?]

1883-08-20 m H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE.

New York, 20th Aug 1883

Mr Campbell

I want an estimate for Albertson at once & also for Erie. The letter you have the sign of Col. Fox formerly the Installation is to be made in a mill. Hutchinson will tell you what they now have towards the plant of 500. Mr

Have I always to remind you what I want. How many times for instance do you require me to ask for Albertson

Please fix up matters Canon of Arkansas estimate correctly

Insull

1883-08-22.

Form L.

THOMAS A. EDISON,

Central Station, Construction Dep't,

No. 65 FIFTH AVENUE.

~~New York, Aug 22~~ 1883

Tell him that Edison says not Rosental
that Grateful Cream land up Stanbury
make rough sketch with pencil not
Let him
to scale but give us the distances etc
by figure. He can do it in 1/2 hour
We don't go much on fancy draughtsmen engineers.
Many thanks for Cheques for Eight
Dollars ($8.50) to have the warranting
This will
Yesterday I shipped the
Dynamo Switches from here to
Bergmann & Co by Philada & Reading
R.R.
you want me to make a
drawing to scale of Circular switch.
I have no drawing here of the
connections here

August 22nd/83

Mr. Dickson
Sunbury
Pa.

drawing, so if you could have one of your draftsmen in N.Y. do it, I would rather you did so, more especially as I could not spare time to the Shamokin business —

Mr Conant is taking right hold of it with me, and will be of great assistance to me —

I am happy to again inform you the light is working most satisfactorily in Sunbury. Since my last letter several more bills have been presented and collected. I have not yet heard one [illegible] and most of the consumers speak very highly of the light, as exceeding by far their expectations

Very truly Yours
W. S. Andrews —

[CHARLES G.Y. KING TO C.H. CAMPBELL?]

1883-08-23 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, 23 Aug 1883

Campbell,

Please note that alteration from double furnace to single furnace boilers may cause some bother in piping, should D.F. be ordered and S.F. figured on.

This arose owing to a misunderstanding I had with drawings of boilers.

King.

[TRANSCRIPTION FOLLOWS]

1883-08-24

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

Paul Gribell Esq
New York

Dear Sir

Barnet & I have been working at

what progress we have made, early next week. I shall probably remove permanently to Shamokin on Monday next, but for the three days ending this week I thought it best

keep an eye on the plant during the evenings. We leave at 7 A.M. and return at 8 P.M., so do not lose any time. The breakage of lamps at

[TRANSCRIPTION FOLLOWS]

I cannot understand it, for the lamps are not near above their normal candle power, according to my judgement. I feel that the fault must lie in the lamps.

I believe that the business cannot fail to pay well, if only the lamps can be made to burn a reasonable time. At present, the expense by reason of [illegible] is [illegible]

[illegible] working on my premises [illegible] remind him about it now and then.

Your favor of the 21st inst. with the for paint &c to hand. I should return [illegible] herewith, but am going to have a [illegible] tomorrow evening. I am sorry [illegible] yet expressed the photographs. [illegible] here so early, and returning late, [illegible] not had time to pack them [illegible] [illegible]

Aug 29th 83

Mr. Andreens

Lamp Carbons

Mont Cenis

Scientific Press

146

[TRANSCRIPTION FOUND IN DOCUMENT FILE]

Sunbury, August 24th, 1883

Saml. Insull Esq.

New York.

Dear Sir,

Conent and I have been working at Shamokin Station for the past two days and are getting on very well. I will report what progress we have made, early next week. I shall probably remove permanently to Shamokin on Monday next, but for the three days ending this week I thought it best to travel from Sunbury as I wanted to keep an eye on this plant during the evenings. We leave at 7a.m. and return at 6p.m. so do not lose any time. The breakage of lamps at Sunbury I am sorry to say is still very heavy, and I must confess that I cannot understand it, for the lamps are not run above their normal candle-power according to my judgement. I think that the fault must lie in the lamp.

I believe that the business cannot fail to pay well, if only the lamps can be made to burn a reasonable time, but at present the expense by way of breakage is altogether too high. I hope Bergmann is working on my pressure indicator. Please remind him about it now and then.

Your favor of the 21st inst, with bill for paint etc to hand- I should return it herewith, but am going to have an article struck off. I shall probably mail it tomorrow evening. I am sorry I have not yet expressed the photographs. Leaving here so early and returning late, I have not had time to pack them- pack them properly- Excepting only the breakage of lamps, resistance -switch, Sunbury Plant is going on first class is every way.

Very truly yours

W. S. Andrews.

[TRANSCRIPTION FOLLOWS]

1883-08-26

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

We are getting up these feeder resistances but will not put them in Shamokin until station is turned over to company for them —

~~New York~~ ~~Aug 26~~ 188, 3

Saml. Insull Esq

We are going to use plug switch for feeders hereafter

You better talk 1½c per hour at Shamokin as to progress of work at Shamokin up to date — & the Canals and Insull = Lundell & Ellis are plugs on the Regulators.

E.

[TRANSCRIPTION FOLLOWS]

I return to you Heim's Bill. It should be paid by Central Station Const. Dep.

I am badly in want of a Spud Jar. [illegible] the engines and dynamos [illegible]

I think we shall be able to make a very nice job of the Stamo-Rem Sta. all the arrangements are very convenient [illegible]

are inconvenient, and do not last as well as they would if arranged differently. I have spoken of the

[TRANSCRIPTION FOLLOWS]

1883-08-26

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

[illegible]

[illegible]

The photographs will be ready
August 14th [illegible]

[illegible]

[illegible]

If you can [illegible]
[illegible]

[TRANSCRIPTION FOLLOWS]

I should be glad to have of you
to buy some Clothes $20 —
Please write Mr Edison of his
[illegible]

I think we shall need
Shamokin in order to
[illegible]

Aug 26 83
Mr S. Andrews
Enclosed (weekly)
Expense account

145

Mr Edison's [illegible]
[illegible] been sent to Shamokin
After he has taken this [illegible]
[illegible]

[TRANSCRIPTION FOUND IN DOCUMENT FILE]

Sunbury August 26th, 1883

Saml. Insull Esq.

New York.

There should be plug switches on the resistance boxes , so as to be able to prevent fields from charging up when not neccesary-------

Dear Sir,

Mr. Rich will give you full information as to progress of work at Shamokin up to date-Mr. Conant and I shall move over there tomorrow, so please address our letters in future to National Hotel, Shamokin.

I enclose my expense account for week ending yesterday, and have made entries of the engineer and mater-man's salaries in order to show the receipt and disposal of amount sent to me by cheques.

I return to you Heim's bill. It should be paid by Central Station Const'n Dept.

I am badly in want of a speed indicator to time the engines and dynamos. Will you kindly send me one?

I think we shall be able to make a very nice job of the Shamokin Station, all the arrangements are very convenient. I suppose I shall receive the Ampere meter and other instruments in good time.

Do not let Bergmann make any more feeder switches like these used in Shamokin and Sunbury, for they are inconvenient, and do not look as well as they would if arranged differently. I have packed up the three dynamo switches that were sent to Shamokin, and they will probably be shipped to New York tomorrow.

I will also try to get the photographs off tomorrow.

I think 1¼cents per hour is too low a figure for our light, as people would willingly have paid 1½cents had they been charged that figure the first.

Please send me another cheque some time this week, as I do not want to run Short in Shamokin.

If you can make it convenient to send me $50, out of salary due, I would be glad to have it for I want to buy some clothes etc.

[TRANSCRIPTION FOUND IN DOCUMENT FILE]

Please ask Mr. Edison if he has thought of anything of heavy resistance ---------- from omnibus wires in Control Stations. I think we shall need these in Shamokin in order to equallize the pressure in different parts of the town. I should think that these could be made of ---------- these cost very much less.

Mr. Rich will have something to say to Mr. Edison and yourself about the ----- resistance boxes sent to Shamokin. After he has talked this matter over please write to me about it just as soon as possible.

Very truly yours

W. S. Andrews

Aug 26/

S Gunell/

I will send in my next on the 28th including the $2.50 per day for the remaining days of the month and, including any incidentals falling upon those days in the account of the first seven days of the next month.

Please send me a check for $25.00 on account of expense.

I go to Shamokin to remain, tomorrow. I am assisting Mr. Andrews in getting the station ready and also giving the metr-man, they have selected, such instructions as will give him a clear idea of the work before he takes it up in a practical way. He has been in telephone work and has a general idea of electricity which is so much the better.

I think that the metr-man here is

well posted and he is interested in the work.

The consumers are pleased with the light and all bills presented are paid on the spot the general verdict being that even if the light should cost a little more than gas, it is in every way so much more desirable that no one here would go back to gas on any account.

Yrs &c.
Thomas P. Conant.

as soon as the Shamokin station is in decent order I will take account of metr stock so that we may see that everything is "O.K."

T. P. C.

[TRANSCRIPTION FOLLOWS]

1883-08-28

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Aug 28th 188

Saml. Insull Esq
Chicago

Dear Sir,

I enclose a copy of the [illegible]
[illegible]
[illegible]

[illegible]
23rd [illegible]
called [illegible]
[illegible]
[illegible]

[illegible]
[illegible]

[TRANSCRIPTION FOLLOWS]

M. J. Carlisle
enclosed draft
of double drawn
Quittance

[TRANSCRIPTION FOUND IN DOCUMENT FILE]

August 28th, 1883

Saml. Insull Esq.

New York.

Dear Sir,

I enclose rough sketch of double main switch, and have proportioned it as nearly right as I can judge, but the figures may need some little alteration. Notification fo shipment dated 23rd inst. to hand - (P 133) Three altered House charging switches are here, but I have seen nothing of four feeder indicators.

Mr. Conant and I are working hard at Central Station- I find him to be a first-rate help, with good mechanical ideas.

With reference to double main switch, I should like to have the binding posts like those drawn which are the same as on the large size plug switches sent for bank (?) of lamps. The connections on present feeders switches are very troublesome to use with large size wire. I have to solder a lot of small wires on to the large wire in order to make good connection.

Please do not forget to send me a cheque this week, for my ~~money~~ moving over here was some expense to me privately, and I am very short. Send me also $50 out of my salary if convenient for I am badly off for clothes.

Yours truly

W. S. Andrews.

1883-08-29

704 STATE ST. OFFICE OF

The Rochester Clothing House,

N. JACOBSON, Proprietor.

5.30 P.M. Erie, Pa., Aug. 29th 1883

Thos. A. Edison Esqr.
65 Ave 5
N.Y.

Dear Sir

Your telegram of today duly to hand the delay in yours of Monday was stupidity of clerk of telegraph office, I will go to Bellefonte tomorrow no train tonight.

The estimate for this city is of the utmost importance as a new Electric Co. has started here well backed who are pushing Mr Patterson hard, and he is becoming impatient with the delay - and that there may be no "slip up" on this plant it is necessary that all possible haste be made in submitting the aforesaid Estimate. Very Respy

J. H. Campbell

1883 05-09!

Shamokin Aug 29/80

Thomas A. Edison Esq
Dear Sir.

Taking the variation of the resistance of German Silver as .00019 for each degree Fah.. My results in question 5 are correct viz.

at -2° = .0094822
" 100 = .0100760

In question 6.
resistance of shunt at 62° Fah = .0100038 ohms
ratio of shunt to bottle = 1 : 972.63
resistance of shunt at -2° Fah = .0094822 ohms
ratio of shunt to bottle = 1 : 944.59 Then,
972.63 : 944.59 :: bill at -2° : bill at 62°
call bill at 62° = 1 then bill at -2° = .9876
1 - .9876 = .0124 = 1.24 % low (I said 1.3 %)

1883-08-29 1

resistance of shunt at 100° Fah: .010076 ohms
ratio of shunt to bottle = 1 : 965.66 Then,
972.63 : 965.66 as bill at 100° : bill at 62°
bill at 100° : 1.0072 = .72% high: My answer was, about .8% high
Hence it appears that my results to 6, are correct.

In question 11 I said .2 of 1 percent for each degree. The exact answer is .215. Hence Brown is correct.

In 65 Brown gives .0000143 grms per candle hour. I gave .000933 grms per lamp hour. In the question nothing is stated with regard to the candle power of the lamp but it appears from the E.M.F & R to be .16. If you

1883 08 29 3

divide my constant per lamp hour by 16, you will obtain the same candle hour constant as that given by Bromer. I did not do this, as the candle hour constant is no longer used. We are both correct.

In 66, the exact result is .000628 as given by Bromer. I obtained the same result but called it .00063. When you were in Sunbury I made the same calculation and you said it would be all right to take it as .00063.
Bromer is however correct if you wish the absolute figure.

In question 67.
The 6 light spool with a 12 light bulb in series offers a resistance of 35.46 ohms

The time resistance of bottle circuit in a 6 light-meter is 34.92 ohms
Calling the time bill 1 we have, since the bill is greater in proportion as the resistance of the bottle circuit is less,

$$34.92 : 35.46 :: x : 1$$

$$x = 1.094 = 9.4\% \text{ high which shows}$$

my answer of nearly 10 % to be correct.

In answering 82, I gave the increase of current as proportional to the increase of pressure. This is not quite true, as the resistance would not remain constant because the increase of heat due to the increase of current would cause a decrease in the resistance of the lamps and a slight increase in that of the shunt.

As I am not in possession of data relating to the variation of lamp

1883-08-29

resistance with variations of pressure. I can give no exact answer to the question. You do not send Bromer's answer.

The same points are true with regard to 83. My result is correct if the increase be proportional to the simple increase of pressure. But since the decrease in the lamp resistance means a second increase of current, the increase of the bill would evidently be more than 194. Not knowing the value of this decrease I am unable to pass opinion on Bromers answer of 264.

If there is any table showing the amperes per standard lamp at various candle power under varying volts I should be pleased to have a copy of it.

Yrs. &c.

Thomas P. Lamont.

1883-08-29

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Boulton Aug 29th 1883

Address reply to

Dear Sir

Amount of freight Bills for the month is One hundred and Ninety Six Dollars $196.11

Mr Doyne received for Saba agent - Mr [illegible]

Very Truly Yours W. D. Rich

Mr Boardman - Mr Good and Mr Gough are all here this afternoon - Mr Boardman says Fullerton Co will be finished straight all the Capital Stock is Paid and the Plant must be running in 30 Days

W. D. R

Monica

FILE No.

SEP 10

FILE No.

Shamokin Aug 31 - 83

Samuel Insull Esq
Dear Sir.

Sometime since I wrote you, asking for a cheque, for the amount of $25.00. If by the time you receive this, you have already sent it please send me as soon as possible, an other for the same sum. If not, please let me have a cheque for $50.00 as soon as you can. I am cleaned out, as the money I brought with me has all been expended in meeting expenses to date. I am sorry to be compelled to trouble you but still more sorry to find myself "dead broke" in a strange place. I do not like to be behind in my

1887-08-31

expenses and by sending me a cheque as soon as possible you will very greatly oblige

Yours Very Truly
Thomas P. Lonant.
National Hotel
Shamokin
Pa.

1883-08-31.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

National Hotel
Shamokin Pa

~~New York~~, Aug 31st 1883

Saml. Insull Esq
New York —

Dear Sir

Your favors of the 30th inst to hand — There was only one customer in Sunbury connected to the feeders and I had his service wire transferred to the mains nearly a month ago — I think that the unusual breakage is occurring chiefly in the first lot of lamps that was sent to Sunbury, ~~and~~ I anticipate better results in the future —

Plug switches will do just as well as the other ones to connect feeders to omnibus wires, as they are only used for testing purposes

the only use they will ever be, while running, that I can see, will be to cut out any particular set of feeders that may happen to get crossed, and I hope they will seldom or never have to be used for this — I have put up the banks of resistance so that they will work all right, but their appearance is not nice, as the backs of the boxes show — If the two boxes were connected up in reverse directions, so that one would increase resistance by turning to the right and the other would do the same by turning to the left, they might then be placed back to back, and they would not look bad this way However they will work all right now, and that is the main point —

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

3

1883-C.P.-31
Form L.

New York, 188

Your telegram came to hand today We have been working very hard this week, and made good progress considering the help I have had. You know that Conant has never been accustomed to mechanical work and does not like it, but still he has given me all the assistance he could — It is very heavy rough work handling such large copper wire and even my hands and back are sore over it. I hope to get things well in shape by Wednesday next but so many little unlooked for jobs and hindrances are continually coming up in work of this sort that it will probably take to the end of the week to put everything in order in Station

4

You may depend upon my finishing up just as soon as possible, if only for the reason that I do not like Shamokin well enough to want to stay here one day longer than is necessary! It is a horrible hole here —

I enclose my Expense A/c. for week ending Sept 1st/83 — and am disappointed in that I have not yet received any more money from you. I am trying to expend as little as possible as I promised — and if you would only send me some of my own money, I would not care, but it galls me terribly to be short of funds in a strange place. Do please send me my salary for July, and then you can let the expense a/c slide for a week or two. This work wears out my clothes so fast — I am absolutely in rags.

Very truly Yours
W. S. Andrews —

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

1893-08-31

Form L.

New York, ... 188

If I come, I might give some attention to the Instr.— necessary for this Station and take them back with me if ready — I could also have a talk with you and Mr Edison. By the way, when does Mr Edison think of coming here?— You will of course understand that I mean to pay my own R. R. fare on this trip but it will be no use for me to come unless I can have some money when in N.Y.— so be kind enough to favor me with a reply by return mail and oblige

Yours very truly
M. S. Pedrew —

1883-09-03

Form L.

THOMAS A. EDISON,

Central Station, Construction Dep't,

No. 65 FIFTH AVENUE,

SEP 10 1883

RECEIVED SEP 7 1883 ANSWERED

FILE No. ..... 188..

FILE No. ..... 188..

New York, Sept 3 1883

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

he has no other business to do. Now
to full back upon, he could not
[illegible] the required conditions of
[illegible]
leaving in the hands of [illegible]
[illegible] conditions
[illegible]

[illegible]

[illegible] — and could [illegible]
[illegible] if ordered — [illegible]
[illegible] place of writing the letter
[illegible] the Chippewa Indians received [illegible]
[illegible]
[illegible] or letter. I think work hard [illegible]
[illegible] get it all finished up and [illegible]
[illegible] in danger [illegible]
[illegible]

Office Chippewa Agency
Aug 30/73
W. J. Anderson
Agt

1883-09-04

A. CAMPBELL'S SONS & CO.,

P. O. Box 2137. 19 Beekman Street,

New York,

Lot 25 N17

To SHNIEDEWEND & LEE,

200 & 202 So. Clark Street,

Chicago, Ills.

Replying to yours of Sept 3rd

Photo Plans left 4/K

Mr Sondheim

Rec'd your telegram last night P.M. but didn't feel like answering it till now. Didn't feel yet enough in spirits. Seems like a cyclone of disappointment. Just as we were a rough road to travel after all this and over the accumulating it would be much harder to have to leave the Building. Have figured hard for (if of Brick) Brick Floors throughout white washed walls and ceiling Sugar and Syrup Room Pine floor 7/8" tongued and grooved Partitions 8 feet high all around with [illegible] 6.9. Ceiling 7/8" [illegible] grooved Pine. Will make the Brown coat

1883-09-04

A. CAMPBELL'S SONS & CO.,

P. O. Box 2137. 19 Beekman Street,

(2) New York,

To SHNIEDEWEND & LEE,

200 & 202 So. Clark Street,

Chicago, Ills.

Replying to yours of .....

Veneered off and stained to imitate stone. Inside Rooms of Pine. Office of Walnut and ash, and woodwork painted with Bronze and oil Colors, and with varnish all round. If Building is of Wood. Shingles outside Lath and Lime Coats, outside of this sheathing paper. Cut three feet in the Boarding outside and building one story high building 20 feet Front Room which is sheathed all over inside. If you will send me size of lot and special report and last copy of "Chicago Architect" and style of Building or sketch of general plan will be to and cost be much down. Our Fireplace with Lot not will be a long shot. The dis. come up so high as Tower of Head house and Not on top

1883-09-04

A. CAMPBELL'S SONS & CO.,

P. O. Box 2137. 19 Beekman Street,

(3) New York,

To SHNIEDEWEND & LEE,

200 & 202 So. Clark Street,

Chicago, Ills.

Replying to yours of .....

If the other "knocks me all up" if I feel well enough I will be down the first of the week and bring the telephone! just as if Mr. Bell wants to help you. Hope it has not inconvenienced you much. Mr Campbell will bring this to the office as she is name of the old Friends. Please send for Swift. Tell them we have sold 15 [illegible] for Jennie Fox as soon as sent [illegible] mail Saturday.

Yours Truly

C. H. Campbell

Remember in telegraphing Mr. Delosie read first Mr. Dillon. Instead of Mr. Campbell

Excuse pencil as ink handy

[TRANSCRIPTION FOLLOWS]

1883-09-04

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

RECEIVED SEP. 10 1883
ANSWERED
FILED NO.

National Hotel
Shamokin Pa
New York, Sept 4th 1883

Say to Andrews that we are printing the Questions & answers & will send him some copies

E

Replying to your favor of the 3rd inst. The Sunbury Engineer is teaching his [illegible] how to run the engine and dynamo [illegible] substitute in case of sickness [illegible] and that

[illegible] that the engineman of Sunbury might be able to answer all the questions relating to his business the replies to which he, Mr Conant, sent [illegible]

[illegible] understand the reports of [illegible] Pennsylvania and the following questions, I informed you that the engineer was not competent to answer all the questions

[TRANSCRIPTION FOLLOWS]

from the fact that I had not even time
to make a copy of the [illegible]
[illegible]

[illegible] they have not yet [illegible]
I should feel much obliged if you would
kindly attend to this matter at your
date, and send me if possible a copy
[illegible]

excuse for ignorance.
Sent to detect any ordinary fault and
I would say here, that I am much
pleased with the manner in which
[illegible] the Station generally [illegible]
[illegible]
I believe that there are at present
more than ~~two hundred~~ and [illegible]
lamps connected at Sandbury [illegible]
ascertain the exact number [illegible]

[TRANSCRIPTION FOLLOWS]

1883-09-04

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

[TRANSCRIPTION FOLLOWS]

I have left places for connecting on the
three Ampère Meters — When we get these
to hand, also the tips for connecting
[illegible]
forward these instruments
Neither mine dwelt for
and my standard Volt-
doom be waiting for the
I wrote a letter to Mr
[illegible]
[illegible]
Hardcourt connecting
or we shall have trouble —
The carpenters have not yet finished
their work, nor has the engineer yet
[illegible]
[illegible]
be completed in a day
be through with all engineering
Station I have not kept
Note of yesterday's work.
[illegible]

Pollock 4" 1/3

W. J. Andrews

Mr the Engineer
Gold Mines
Ltd Sandhurst

[TRANSCRIPTION FOUND IN DOCUMENT FILE]

1883-09-04

National Hotel
Shamokin, Pa.
Sept. 4th, 1883

Saml. Insull Esq.
New York

Dear Sir,

Replying to your favor of the 3rd inst.. The Sunbury engineer is teaching his brother how to run the engine and dynamos, so that he may have a substitute in case of sickness, but I do not think he is yet competent.

Mr. Conant says that the meter-men at Sunbury, ought to be able to answer all the questions relating to his business the replies to which he, Mr. Conant sent in to you.

At the time that I sent in my replies to questions relating to dynamos, and the running of stations, I informed you that the engineer was not competent to answer all the questions, from the fact that I had not even time to make a copy of the questions, as you were wanting them so urgently. You promised to let me have a printed copy of questions and answers two weeks ago, but they have not yet come to hand. I should feel much obliged if you would kindly attend to this matter at an early date and send me if possible a second copy which I would give to the engineer at Sunbury, and then he will have no excuse for ignorance. He is able at present to detect any ordinary fault, and I would say here, that I am much pleased with the manner in which he keeps the station generally, and with the interest he takes in his work.

I believe that there are at present more than two hundred and fifty lamps connected at Sunbury, I will ascertain the exact number and inform you. As you are probably aware by this time Nolls the wireman left Sunbury for New York on Saturday last-- Up to present time, Tuesday evening, he has not put in an appearance at Shamokin. In the matter of your instructions-------(illegible)---- Shamokin-----I will attend to them.

I am sorry that you have occasion totake Mr. Conant away and if you could leave him here for a week or so longer I think it would prove advantageous. Mr. Leonard

[TRANSCRIPTION FOUND IN DOCUMENT FILE]

1883-09-04

has not yet arrived here.

I have this day completed all the wiring main in Central Station excepting the connections of spare dynamo. I have left places for connection in the three Ampere Meters-- When will these be sent, also the pressure indicators? I hope that Bergmann is pushing forward these instruments also that double -main switch for spare dynamo and my standard volt-meter. I shall soon be waiting for the ampere meters etc. I wrote a letter to Mr. Clarke concerning these instruments --------that Mr. Bergmann----------directions concerning these are -----or we shall have trouble.--

The carpenters have not yet finished their work, nor has the engineer yet finished all that has to be done to the engine but I trust that ------ be completed in a day or two. I shall be through with all my work inside station, if I am not kept waiting for instruments, by Saturday next.

Yours very truly

W.S.ANDREWS.

1883-09-05

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
395	Unrpd	H Collect	

Received at 852 BROADWAY.

Dated Bellefonte Pa 5 Sept 5 1883.

To T. A. Edison

65 Fifth Ave NY

Yes have map of Removal

go tomorrow

J. R. Campbell

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-09-05

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

SEP 5 1883 ANSWERED

NUMBER	SENT BY	REC'D BY	CHECK
127	Fylm	46 Pd	Sept 5/188.3

FILE No.

Received at 852 BROADWAY.

Sep 5 1883.

Dated Brockton Mass

To T A Edison

65. Fifth ave

Meddota and Falliver Maps

read this morning mendota

determination mailed Express

me blank Charts of Fall River

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-09-05

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK

Received at 852 BROADWAY.

Sep 5 1883.

Dated

To

men urgently needed inside
wiring new buildings Can ~~go~~
get good ones from Bolden
should be here today advise
by telegraph

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

~~DIRECT WIRES.~~

Form No. 1.

1883-09-05

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK

Received at 352 BROADWAY.

Dated Sep 3 1883.

To

immedy whether men have been sent advise using bordens men

Sprague.

This telegram has just been received at the office in 352 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

46 Sept 5/83

F. J. Sprague

to

T. A. Edison.

1883-C-105

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

RECEIVED
SEP 7 1883
ANSWERED
Sep 7 1883
FILE No.

Hotel Belmont
~~New-York~~, Sept 5 1883.

Dear Sir:

I wrote you very hastily last evening concerning matters at this station. As to the time of finishing laying of the tubes, I quoted from memory. Some trouble is found with stones in a part of the trench, but if weather proves favorable, I think the tubes will be entirely ready in a week.

Inside wiring. I wrote you by last night's mail, and I again telegraphed this forenoon, urgently requesting you to take some steps to have this done at once. I saw Mr. Jacks yesterday and to-day, and Mr. Garrison was here to-day.

1.

1883-07-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

They feel quite strongly that there should be no further delay, and from all I can see, immediate action is necessary. Thus far I have received no answer to either letter or telegram, and in the absence of any advice, Mr. Gammon and Mr. Jacks have decided to go ahead at once, and have some wiring done by the Boston workmen. There will be here to-morrow and will put in about 200 lights.

Inside Station. There is plenty of room, and it is going to present a very fine appearance. I am laying out my own work, so that

2.

1223-09-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Left from Line Carpenters to work heavy wire under his supervision - no need of wiremen

New York, 188

it will be all ready by the time the necessary wire and other materials are here -

There are some deficiencies in the switches. Of these I will advise you to-morrow. When all the material is ready for continuous work, I will need you for working on heavy wire - I will need these for about three days, and the station work will have to be done in about that time after the material is here. I can get the men from Boston and thus save the travelling expenses from New York - The overseeing the work, making sundry connections and tests, and

3.

1883-09-[illegible]

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

keeping up the determinations on charts sent here, (of which I have today received six with a request for immediate action on at least two) will make it imperative that I have them even just when desired.

Charts. The two charts mailed on the 3d were received this A.M. This P.M. I received charts expressed by the Adams Express yesterday morning. I called attention to the fact that packages might be given in at the U.S. and B. Dispatch Co. office at #940 Broadway up to 4.40 P.M. and delivered here on 4.

1883-[illegible]

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

the following morning. This Co. sends direct. The Adams Co. by way of Boston.

Explicit and full information is needed on all charts sent me for determination, and where a chart has been once worked on, I would like a clean one — Fall River. One chart, determined at Nantasket Park, and conductors to be laid marked on afterwards. This is very confusing, and is apt to lead to a serious error. A new central station is marked at the bottom of this chart. This is incorrect, as there are, beside the old central station and this new one, three others under consideration, and one of these is much more

5.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

certain of being taken than the one marked as the station on the chart sent me.

Lundota - The determinations were sent you this morning - Will express chart in the early train to-morrow -

Haverhill - I prefer my own determinations, and append the sizes of mains and feeders - as indicated on full lines - The sizes are commercial sizes for underground mains. The dotted lines are not given - Should pole line be used, the sizes of wire are given in pencil marks on chart, 5% on triple length of pole conductor to be allowed for

6.

1883-09-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

Wabash

black and white ends.

Racine and Westport. Are these wholly or partly underground or overhead? Not only will the size of main and feeder be different, but the number of feeders will often depend which of the two systems is to be used. I will to-night telegraph for this information.

Haverhill charts will be expressed in the morning.

Pressure Indicators. Where are more here yet. I trust we shall have none of the old Tennard roofs. I feel strongly that this station should and can be made a model station. It will

7.

1883-09-05

Form L.

THOMAS A. EDISON,
Central Station Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

visited by thousands, and holds an important influence over your Eastern interests. In connection with this matter, I will wait upon you to-morrow, or the day following, on the subject of Automatic Regulation. Mr. Gavin has addressed me on this subject, and is quite willing to stand the difference of expense. The trouble you will probably anticipate about the varying drop seems at first sight to count against the plan, but I think it can be overcome, and I will send for your consideration a plan of working —

P.

(Would do you more good if you would make Regulation = please don't go to Washington & get them to do it)

1283-09-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

Concerning the pressure indicator on which I touched last night I am positive I can make the necessary arrangements without going to the feeder terminals. If this keeps around

The main Auburn plant depends entirely. We have now at present save the new house-changing switch. and this is rather light. However it will do for the present if we cannot get the other. By the way, why not make a heavier cone of the same pattern with improved tubular connection for large wire. It will work perfectly. The only disadvantage

9.

1883-09-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

is the double handle, and is very nearly the same as our Andrews proposed.

Need a "break-down" switch. One of the new make-and-break circuit, or feeder switches is the best, the one with tubular connections.

Very truly yours,

H. H. Spragues.

10-

Form No. 1.

1883-09-06

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
453	Unrpd	Unpaid	

RECEIVED SEP 7 1883

ANSWERED Sept 7 1883

FILE No.

Received at **852 BROADWAY.**

Dated Renovo Pa 6 Sept 1883

To T. A. Edison

Construction Dept 65 Ave

N Y

Will be ready to leave

here tomorrow afternoon Where sept

Answer J. R. Campbell

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

46

Sept 6" 93.

J. R. Campbell

inquires when the is ~~they are~~ to go next

Form No. 1.

1883-09-07

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
505	un	ob	87 Paid 105

Received at **852 BROADWAY.**

Dated Brockton Mass 7 Sep 7 1883.

To A Edison 65 5 ave

Express fifty Johnsons Newline Connections also thirty five safely catch nuts for same can use with great advantage Racine mailed last night williams-port soon as possible Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-09-07

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
500	Cs	Rd	33 paid Cc

Received at **852 BROADWAY.**

Dated Brockton Mass 7 Sept 7 1883.

To T A Edison

65 Fifth Ave

Williamsport Sept 7 Dr. Pedrick Mail first class matter thirty seven hundred thirty three lights received Sunbury Remnants double zero need some zero for omnibus what about Fall River Station shall we determinations Sprague Mail

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

THE WESTERN UNION TELEGRAPH COMPANY.

1883.02.07

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
HH 52	Ln Rd		Spaid

Received at **852 BROADWAY.**

Dated Renovo Pa Sept 7 1888.

To T. A. Edison

RECEIVED SEP 10 1888 ANSWERED

Construction Dept 65 Fifth Ave

Sep 10/1888

FILE No.

Send map for Williamsport We'll go there tonight

J. R. Campbell

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-10

Brockton - Mass -
Sept. 10th 1883 -

Mr. T. A. Edison -
Dear Sir!

I have to acknowledge letter of the 8th inst., and beg to reply as follows -

There is, I think an undue amount of criticism of whatever I have done or said concerning matters at the station, both as regards wire running and the automatic regulation, and I may add my own particular business - To be candid, I do not look upon all these remarks as coming from yourself, but rather as the emanation of your private secretary - Anything I said

1883-09-10

to Mr. Garrison or to Mr. Jenks was in answer to requests on their part, and was perfectly well understood to be unofficial, as I told them that the inside moving of houses was none of my business, and furthermore that I had never had anything to do with it. The fact, however, that such was the case did not prevent my seeing the necessity of immediate action, and simply and purely on their behalf and in the furtherance of your own work, to write and telegraph you as I did. To one so possibly understand the local position of affairs on their ground, and whatever projects there are for deepening mooring, where a new building is being floated, delay will increase the cost unnecessarily. Lest the

2

squares of this district, within the span of a thousand feet, five important brick buildings have been erected or are in process of construction - and local people are making a great many inquiries of the managers as to what they can do with the electric light using in view of immediate changes of their own business arrangements, which business affairs cannot and will not await the action of people in New York.

Automatic Regulator - Mr. Garrison addressed me on this subject, and asked if the automatic was not to be put in here, and when I told him that provision was made for hand regulation, he expressed himself as very desirous that the automatic should be put in - and when

3 I told him that the automatic

1883.09.10

was necessarily more costly, he expressed himself as willing to make the difference in the contract if not too great in amount. When first spoken to I not only did not encourage the idea, but I expressly stated that it was not just yet practicable. Since thinking of it, I see that while we get a variable drop from the bus bars to the feeder terminals, we want a constant potential at the feeder terminals, and hence we can make the automatic work just as well as the hand regulator by taking the pressure wire from the terminals of that feeder which mostly nearly represents the mean condition of affairs, and bring these to the automatic terminals, making of course the necessary adjustment and allowance for the return

4

1883-09-10

drop due to the resistance of the tennis - I feel very certain that the automatic will work admirably if so used - Saturday night I went to Boston to see for myself the action of the regulator at the Foreign Exhibition - It was well adjusted, and worked thoroughly well - I hear but one verdict in the matter, and from all classes who have had anything to do with it, which is that it works admirably -

I have now to concur very cordially with Mr. Garrison's request, (and I think you will understand that some discussion has been necessary) to work you and urge the replacing of the automatic of the present band regulator -

This will of course involve an extra expense, but if not over $300 or $400, I think this will be worthwhile - Nothing so

5-

1883 09-10

impresses anyone with the beauty of the Edison system as to see an instrument dealing with almost human intelligence to perfectly control the potential existing on the mains - and the amount of light given off all over a district -

I know of no one thing which will be so effective at present in establishing confidence in the entire practicability of your work - This station, together with those at Lawrence and Fall River, will be visited by a large number who will, as capitalists, be interested in all the Eastern Edison enterprises - I would like as early information as possible concerning your intentions in the matter -

A bungling has been effected in the matter of the Land regulators we have - Precisely
6 the same mistake was made

1883-09-10

at Shamokin – There are two banks of two rods each – a shaft passing through and bearing connected with it the springs and commutators – The backs of the boxes are placed together, the springs thus acting to hold each other against their respective commutator blocks – So far well and good – except in one sense, but no change of connection has been made so that in putting resistance into the one machine resistance is cut out of the coils of the spare, and vice versa –

If the boxes stand in the same direction, the springs act in the same way and necessitate a collar – To change this matter, all that is necessary is to change the free end of the coils in the spare box – To do this, however, it is necessary to take off the

7.

1883.09.10

top of the box and break and make the connection of the main entering wire — Instead of these being soldered, the main wire should be brought up through the hole opposite the stop block, and the ends of the coils to the adjacent blocks. Now without any trouble at all, the end of the main wire can be connected to either end of the resistance coils —

It is now necessary to change the contact of the term 180 p —

However, I have not yet made the change, as I want to hear about the automatic —

Mr. Rich is trying to find some bevel which so that we can put these boxes, if obliged to use them up against the wall, instead of standing out so awkwardly and conspicuously as at present —

1883-09-10

assistance – I am advised that when Mr. Andrews started the Sunbury Central Station, he only required one man to assist him, and that it is presumed that I can work with equal economy.

I think the reference had better not have been made – Mr. Andrews and myself, to a great extent under Mr. Edison's supervision, and with his advice, started the central station at Sunbury – Considerably more than one man was required, and of that fact we are all quite aware – Again, the conditions are not the same – In addition to my regular work, I have to do that formerly required of two men at Menlo Park, and not only that but thus far I have been twice telegraphed ~~to~~ "if possible to send" or "do all in your power to send &c" – I cannot well

9.

1883-09-10

be engaged in mathematical calculation on which some reliance must be placed; and drilling a carpenter who has not only the lack of knowledge, but has not the manual skill in handling heavy wire that an intelligent roiman would have. The cost of such drilling would be more than the wages of one or two reliable men, whose services would not be required as long as it would take to break in an "assistant". With a good man my eye and thought need not necessarily be on him all the while. With a wood chopper, they never could be anywhere else. On all these matters, I am making true economy and reason. I do not believe in letting the work drag on. With all my material on hand, I could have done the work with reasonable
10. assistance in three or four days.

1883-09-10

Switches - I must distinctly resent any critical criticism on electrical matters on the part of Mr. Insull - both as regards the parts which are necessary, or how they should be fixed. I am told that the switches are ordered on Mr. Andrews' experience at Duxbury. Also that "it is our desire to have uniform electrical connection for all our stations, and if you are unacquainted with the fixtures which we have decided upon, and which experience has proved to us to be the best for our business, we shall be very glad to give you what information you want at any time you may ask for it."

That experience as regards these stations has been remarkably limited. We have not reached that millennium, nor can I sit down and fold

17.

1883-09-10

my hands with the consciousness that everything is perfect — for we all know it is not so —

It is my duty to make the electrical arrangements of a station as near perfect as possible, to have them as thorough as can be, and to do this so as to give the greatest satisfaction to the people interested locally, to myself as an electrician, and lastly to Thos. A. Edison, from whom alone I recognize the right to criticise my work — and to whom alone I hold myself responsible for the reliability of such work — Because a bad piece of work is done, or might be done in one place, I fail to see the advisability of perpetuating it — I do not say that much work has been done, but I beg not to be referred to Lundburg — Moreover,

12

1883-09-10

every important change that Andrews has suggested, or I may say, any modification he may have made and fit to suggest for Shanokin, which I believe has not yet been started, and which is not even mentioned in the letter of Sept 8th, has been referred to me by you, Mr. Edison, for my comment and criticism — As the suggestion that, if I don't know enough to make an electrical connection, I had better write for the information is rather too good a joke. If my experience with the hand regulator here, and Andrews' experience with the same and with his lighting connection is a sample of transmitted direction, I think I had better experiment a little, or carry still, use common sense and my eyes — Unless an electrical direction comes directly from you—

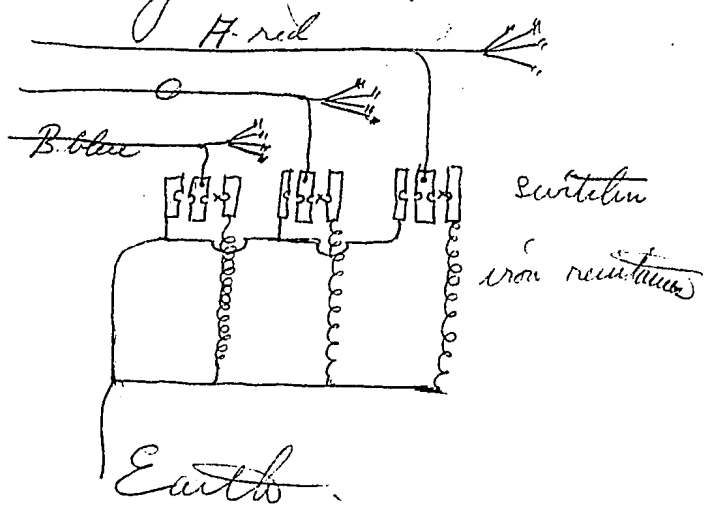
13.

self, I shall ~~shall~~ study it somewhat before committing myself blindly –

The bank of ~~first~~ lamps should have 12 instead of 10 small switches (plug) for there are six double banks instead of five, and they are already up –

These carry 50 lamps each –

The lightning connection would I think be better made with the same plug switch as is used for the ~~first~~ bank, three of these being used as for following diagram –



14.

1883-09-10

These to be used instead of the six small plug switches sent.

Of the feeder switches, one has a split tongue, and the other seven have not. Large plug switches are quoted twice. They are all the same, but four of them came to hand this A.M.

3 Dynamo-changing switches. These I am very positive are not here - nor do I see any necessity for the same.

1 Double dynamo changing switch of new design & this is not yet here.

Breakdown switch. A simple switch such as is used on the feeders (with the tubular wire connection although not necessary) to connect the dynamo red & blue, in case the spare for any reason was not available. This should be put in without fail. I telegraphed for fifty of

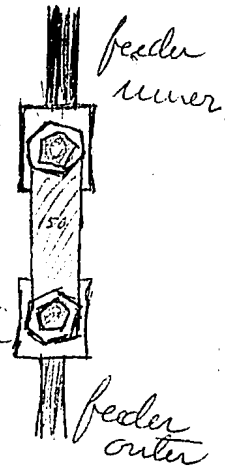
15.

1883-09-10

Johnson's new line connections, but have received no word about whether they will be sent. I would like to use them where the short piece from the feeder switches connect with the omnibus, and in general to avoid soldering. They can be slipped on to the end of the wire, and will make neat compact work. There are feeder safety catch line for the central station, but no arrangements for connecting. Johnson's line connection could be made to work admirably by splitting the end of the wire thus: and letting the two halves act as two wires in the junction. A lock nut under the head of the bolt would give ample connection for the safety catch. so that the

16. appearance would be one-

1883-09-10



thing like this —
Three are needed at the central station — safety catch
Wire — #0000 and #00 wire received this week.
Last week round hard specially-drawn wire was received from Lenbury — I have made arrangements for using it for feeder connections, but it does not look as well as the new wire — I shall, however, have it lightened somewhat —
Blowpipe — not yet received —
Insulating tape — Not yet received —
Telegrams — I see one telling me that you were attending to the wiring in New York; not yet received —
That referring to Fall River, requesting two alternating alarms was received, and charts and

17-

1883-09-10

determination. mailed the same afternoon - No mention was made in the telegram of the shipment of wire as stated. Mr. Watson left for New York, and possibly then caused the mistake, but I received a telegram -

Now Mr. Edison, I may have written rather tartly, more so than is required in a purely business letter, but so far I have written in a personal way, and with all due respect for yourself - I cannot but feel hurtled on the receipt of a letter through which runs such a vein of unnecessary sarcasm and criticism - I think I have my properly connected Mr. Sunell with the matter for the letter is written in the dual person and signed by him for you -

I know, however, but one head to the Edison system, and that head is its originator - and

18

1883-09-10

I prefer to recognize that fact. I have seen enough of the world, and have sufficient judgement to meet such men and act as a business or social footing without any direction from your private secretary as to what shall be the nature of my private conversation, and from such I beg to be excused.

Very truly yours,

H. Morgan

19.

Form No. 1.

1883-09-11

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. ANSON STAGER, President.

NUMBER	SENT BY	REC'D BY	CHECK
456	Co	B	13 paid

Received at 352 BROADWAY.

Dated Brockton Mass Sep 11 1888.

To T A Edison 65 5 ave

Bellefontes today Adams Express twelve hundred light five feeders twenty nine hundred dollars

Sprague

This telegram has just been received at the office in 352 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-11.

Brockton Mass
Sept. 11, 1883 –

Mr Thos A. Edison.

Dear Sir:

Will you please have some telegraph wire for your division overhauling the automatic. I would be better to test the pressure indicator with resistance in circuit equal to that of the pressure coils – I will send these as soon as I can get the lengths – which will be to-day – Should be very glad if you would send the new regulation for feeders to use for connections and test – I will need the sign of some cuts to-day – Bellfounts will leave to-night – I have heard nothing concerning the amperes indicator

Very truly yours
H. J. Prague

Form No. 1.

1883-09-14

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
525	Cs	Rd	Q1	

RECEIVED SEP 15 1883

ANSWERED

FILE NO.

Received at **852 BROADWAY.**

Dated Brockton Mass Sept 14 1883.

To Samuel Insull

65 Fifth Ave

Seven hundred Sheet protected Engines and Dynamos running splendid boiler Tubes arrived at Lawrence today. Shall commence at Lawrence Monday answer.

W. A. Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Answers to questions on Dynamos. Ira Watts 1883-09-15

Answers to questions on Dynamos

Ira Watts

Sept 15th 1883

1 The centre between the forces + + −

2 So as to obtain an equal amount of + + − forces, and to prevent sparking

3 Yes.

4 Uneven commutator, poor contact of brushes &c. File commutator, and adjust brushes. Do the best I could to stop sparking and let the machine run.

5 At angle of about 42°

6 By counting, loss of power sparking.

7 So that commutator will wear evenly

8 Armature striking fields. By examination

9 Use waste wet with ice water.

10 Open switch on dynamo that belt broke as quick as possible. then switch in an other dynamo to take its place.

11 Too much load, take off some of the load and if the heating continued, and only small load would switch out dynamo and examine armature

12 By rising or lowering brushes

13 Lamps above power one minute + below the next.

14 Be sure that I had equal speed, adjust brushes and close switch.

15 Lower the lights until field was charged and then lights would come up to power.

16 Open the switch on the one that got pinched.

17 Make a motor out of one that slipped

18

19 To prevent bad sparking

20 Short circuit

21 Dust &c, by cleaning.

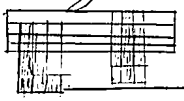
22 Poor connections, and local short circuit

file up commutator &c.

23 See if there was not a high bar could tell better when we did stop.

24 By changing position of brushes every day.

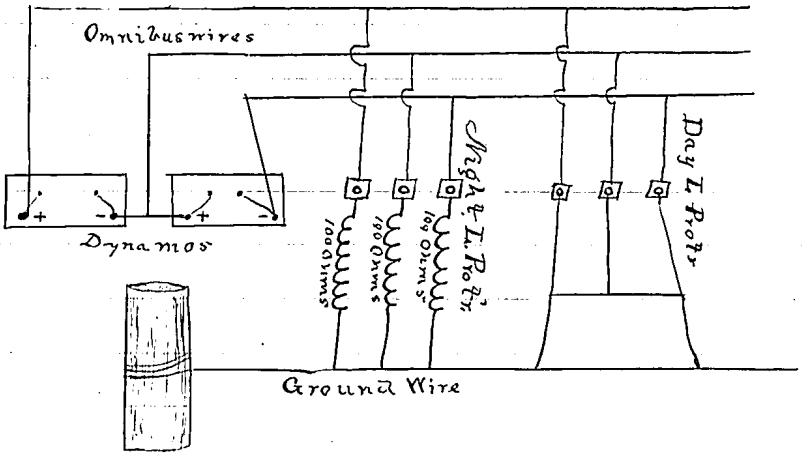
25 Too much load would cause it. By cutting it out from commutator, winding end with tape, and adjust brushes one above the other



26 Make a motor of one.

27 Every night before starting

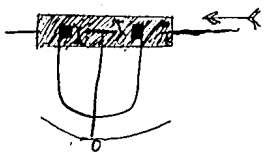
28



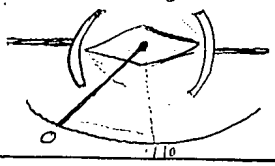
29 A unit of E.M.F.

30 A unit of Current

31 Used to tell what amount of current is being used by lamps.



32 Used to tell the E.M.F. across any two wires.



33 115½ Volts

34 Keep same pressure.

35 Cost of new lamps in a short time

36 Cut out some of feeders in the light part of the town.

37 By looks of it.

38 By keeping an acct of them

39 Test my lines before starting if they were on poles

40 A short circuit. Remove it by cutting or otherwise.

41 Allowing 70' to back of consumers premises

the wire should contain 29855, 57,[illegible] & 3522 circular mils. respectively.

---

42 Multiply the number of lamps by double the distance in feet, and the product by the constant of the percentage of loss you wish, the product gives the circular mils required, or the number of lamps multiplied by the distance in feet equal the No. of wire indicated by nearest constant not smaller than product.

---

43 Short circuit

---

44 Put resistance in B line and put new safety catches in as quick as possible.

---

45 Keep both going.

---

46 Shut down and repair.

---

47 To make commutator wear evenly also bearing

---

48 Spring

---

49 It is not magnetic.

---

50 To keep machine in line and tighten belt

smash up.

51 When the lights light up and by the magnitism in field pieces.

52 Open Dynamo switches, feeder switches and close day Lightning prot. switch.

53 Lightning prot., Dynamo and feeders

54 Pressure enough to make good contact wears out commutator.

55 Yes, take about half an hour.

56 To about 1/16" and if new style commutator would send for one, and put it in myself.

57 Poor connection or short circuit by a compass.

58 Scrape the box

59 To supply main with current in all parts of the dist.

60 Mains supply service wire and feeders supply the mains

61 So as to have pressure at mains nearly the same as at the station + if lamps were connected to feeders there would a drop in E.M.F.

---

62 If the A. + B sides are unequal the surplus current will flow through it. it is a saving of wire, but if both sides are equal it could be cut out.

---

63 By the Ampere meters.

---

64 No effect. The A side would be above candle power, and the B side below.

---

65 So as to throw a house onto the A or B side of the line.

---

66 Would balance line by house switches

---

67 By the feeder indicators

---

68 Put half the Theatre, and half the house on each line. A. + B.

---

69 So that if a cross occurs they will burn out and not short circuit the line.

---

70 Find out where the cross was and repair.

damage as soon as possible

71 Reverse the meter

72 A cross in the resistance

73 An arc between the lamp and the socket

74 Yes.

75 Would stop remove wire then start as quickly as possible if wire on armature had not bulged out so as to strike field

76 Take out old armature and would try boxle + if they would do to run with some heating do so until I could fit them to new armature, put in new armature see if there was a cross any where and then start up.

77 As an engine sometime backs up.

78 Find out what his Gas bills were.

79 Yes it is.

Page 14 4th question. Put an equal number lamps on each line. A + B.

9/17/83

From Ira Watts

1883-09-20

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

RECEIVED
SEP 24 1883
ANSWERED

National Bell
Stamping Co

188

FILE No. ..... New York, Sept 20th 188

Saml. Insull Esq
Chicago Ill.

Dear Sir,

I believe have bills daily approve
I have another bill of $75.00 for
wages &c. paid by Messrs Bergmann
[illegible]

Sunbury — I be doubtful if
bill as I had no personal knowledge
of the work [illegible]
[illegible]

I will therefore hold the bill
until I go to Sunbury [illegible]
[illegible] submitted to Mr Bergmann
[illegible]

145
Sept 20/53

W. S. Andrews
re bill to J. Holt

1883-09-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
101	J. M.	SPK	9 X 5

Received at 852 BROADWAY. Sep 24 1883.

Dated Sunbury Pa

To Sam'l Insull
65 5 Ave

Dont want Leonard at Shamokin probably return tomorrow

Edison

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-25

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
487	Cs	Rd	9pa	642

Received at 852 BROADWAY. Sept. 25 1883.

Dated Brockton Mass 25

To T. A. Edison
65 fifth Ave

Natick and Fall River tonights Mail where are Brockton Meters

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-27 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Sunday Sept 27th 1883

Address reply to Sunday Night

Private

[illegible] received the 2 p.m. on 25th [illegible] today - the letter containing cheque was received Wednesday Telegrams and letter were all [illegible] - I have been at Pearl St. [illegible] upon the [illegible] to know that there is any [illegible] - I hope they will [illegible] the [illegible] to Dynamo I have [illegible] as well as [illegible] as you say the length of the [illegible] will be about the same as the [illegible]

I have not been enough for [illegible] but have forward and up [illegible] by [illegible] plenty of room — the Engine has not arrived neither can I hear from Mr Sims Sims is [illegible] it is supposed to shipped on Saturday last — the amount of [illegible] which should be paid on Saturday is about $[illegible] for which I hope upon [illegible] a cheque tomorrow. Soon I [illegible] of Saturday morning in the Central Station Stocks yet — Now about Dynamos - [illegible] Gaying up today - [illegible] from Handy Dynamos they are [illegible] - [illegible] they are working here as fast as [illegible] [illegible] Yours [illegible]

Yours [illegible]

1883-10-02

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

National Hotel
Shamokin Pa

~~New York~~, Oct 2nd 1883

Saml. Insull Esq
New York

Dear Sir —

Your telegram from Bucklow received this day, and unless otherwise advised by you, you may expect me at 65 Fifth Ave on Sunday next —

Your letter of the 30th ult also to hand today, and I am glad to hear that Bucklow Station is such a success — I will make the drawings of switches &c as you desire — I wish you could come to Shamokin whilst I am

1883-10-02

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

here — Could you not do so, if you were to manage so as to leave me here till Wednesday 10th inst. — And then we might return to New York together? — I think you will like the arrangement of our Station here. It looks very well both inside and out — Everybody is pleased with our light, and with coal at 65 p. ton the Company ought to make money

Yours very truly
W. S. Andrews —

1883-10-3

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

SEP 29 1883

FILE No .....

Williamsport Pa. ~~New York~~, Oct. 3d 1883

Thos. A. Edison Esq.
65 Fifth Ave.
N.Y.

Dr Sir

In reply to your favor of 2d inst. beg to state that as regards mistakes referred to concerning Concessions, that I did endeavor to find out definitely the idea of this Co. as to the plan of securing Concessions which was that they would attend to it themselves, therefore as is natural I gave the subject no more thought, and it was not definitely settled that I should attend to it until after Mr Shaw had seen you at Sunbury, and as I then wrote you, gave the matter immediate attention.

As to the delay, this was caused by the home office in not having the maps and charts here that I might attend to the work at once, as it was I was delayed one week, just, awaiting receipt of maps properly marked, and I can

assure you these delays are very disagreeable to me, as I much prefer finishing a City at the earliest possible moment and pushing forward to another, as it is my object to advance the interest of the Co as much as lies within my power, and not incur Expense to no purpose.

As stated in yours, I shall in future consult the local officials of the proposed Co and secure positive replies as to their ideas concerning ~~their~~ concessions.

Trusting my explanations will prove satisfactory and shift the responsibility of delay to the proper parties, I remain awaiting further advices

Very Respy

J. F. Campbell

City Park

Lake

Respecting City Park

Ottawa 3 [illegible]

Ottawa 3 [illegible]

J. F. Campbell

[illegible]

1883-10-03

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Brooklyn ~~New York,~~ Oct. 3 1883.

Dear Sir:

I have to herewith hand you statement of expenses for four weeks ending Tuesday Oct. 1st.

In future, I will send statement for 7th, 14th, 21st and 28th, days of month, as requested.

If you will kindly send balance, together with check for $200 on salary, for which I have an immediate call, I shall be much obliged.

Yours very truly,

F. J. Sprague

Mr. Samuel Insull.
New York City.

45

Oct 3/1870 Small

F. Sprague

requests Check

Have Are Expects

for money

Note

1883-10-04

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

National Hotel
Shamokin Pa

New York, Oct 4 1883

A. O. Tate Esq
c New York

Dear Sir,

This morning I drew on Mr Edison for $100 according to Mr Insull's telegram and Mr Doty cashed draft. I have handed over $30.00 to Mr Conant.

I am very glad to hear of the successful starting of Brick Row Station and am happy to report that everything is going on well here.

Very truly Yours
Th. S. Andrews

1883-10-04

No. Subject:

CENTRAL PENNSYLVANIA TELEPHONE AND SUPPLY CO.

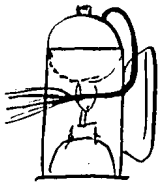
H. R. RHOADS, PRESIDENT. J. E. WILKINSON, SECRETARY AND TREASURER. R. M. BAILEY, GENERAL MANAGER.

EXECUTIVE OFFICES, WILLIAMSPORT, PA.

National Hotel
Shamokin Pa
~~Oct~~ Oct 4 1883

Saul Insull Esq
New York

Dear Sir
I rec'd this day by express from New York a box containing a gas blow pipe, such as glass workers use, and suppose this has been sent by mistake for the Alcohol blow lamp I asked you to send to this place for the Shamokin Tel. Co. They want a large lamp for soldering services to mains — just like the one you sent me only larger. Mine is 7 in high to top of safety valve, and at 3 in diam. I will return the gas blow pipe, and would ask you very kindly to see that one of the right kind is sent here as soon as possible



Very truly Yours
W. S Andrews

Pressure Indicator

10/8/83

1883-10-04

Form L.

THOMAS A. EDISON,

Central Station, Construction Dep't,

No. 65 FIFTH AVENUE,

Shamokin Pa

~~New York~~, Oct 4th 1883

Sketches placed in Respondence dept to be forwarded by next mail to Mr. Edison in the matter of Mr. Carver's letter

Ref'd to Clarke

Thos. A. Edison Esq

New York —

Dear Sir —

I find that our pressure indicators do not continue to work as well as they ought to — I multiplied areas three (3) on a large conductor in Central Station, and made them read all alike — I find in the first place that the pointers seldom show a right zero, and secondly that they will in time vary from each other to the amount of two or three or even four volts in two or three days. I have been giving some thought to this subject lately, and desire to submit a few ideas to you — as a good indicator is one of the necessities of a Central Station plant. — In our instr. as made at present there are two or three bad points which evidently lead to variation of reading: —

1882-10-04

2

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

1st There is a permanent magnet, which is liable to change its strength from many causes, and which I should like to dispense with entirely

2nd The resistance of coils is too low. They heat up very much, and the continued heat appears to affect the readings.

3rd The steel spindles become oxidized, or the heat causes expansion of the working parts, so that pointer moves very sluggishly—

I have been thinking out a little design for an indicator, which is based on Mr Clarke's idea of two coils, in which I think all the foregoing difficulties and elements of error are got rid of— I wish to make the readings depend on certain and absolute factors which are subject to no variation. Two factors are sufficient to work the inst.— I.) The amount of current passing through a fixed resistance at a

1883-10-04

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

3

New York, ... 188

The readings dependent on the relative

known E.M.F. and (II.) Gravity — All kinds of springs, and permanent magnets, are very liable to become unpressable only by the symbol ☒

I send on another sheet a rough sketch of an indicator which I think would work correctly — It would always have an absolute zero and would be subject to little or no variation from outside influence, excepting close proximity to a strong magnet, which could of course be easily avoided. Moreover, when once standardized, it would be good for all time, and being very simple in construction could I think be made for about $10.00 or a little more — If a long scale is desirable a mirror could be attached, but the scale would then have to be perpendicular

I hope you will find my sketch and note intelligable, and should be glad to have your opinion of the idea. Yours very truly,

W. S. Andrews

Form No. 1.

1883-10-05

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
280	Coh	Voted	201

Received at **852 BROADWAY.** Oct 5 1888.

Dated Shamokin Pa

To Paul Inscell 65 5 ave

You may expect me on Sunday time and place appointed

M S Andreno

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-09

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
130	Xoh	SPO	1047

Received at **852 BROADWAY.** Oct 9 1888.

Dated Brocton Mass 9

To Paul Inscell 65 5 ave

Rich is in Lawrence now

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

[FROM C. H. CAMPBELL?]

Form No. 1.

1883-10-11

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
479	Ug	Dy	5 Coll Ans

Received at 852 BROADWAY.

Oct 11 1883.

Dated White Plains NY 11

To S. Insull

65 Fifth Ave

Will if I can.

Campbell

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-11

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
570	Ug	Dy	13 Pd

Received at 352 BROADWAY.

Oct 11 1883.

Dated Brockton Mass 11

To Thos A Edison

65 5 Ave

Middletown Norwich & Tiffin left tonight first Chas mail Tiffin Has three feeders

Sprague

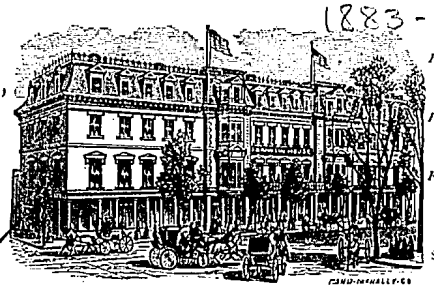
This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-11

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.

A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

Lawrence, Oct 11th 1883.

Samuel Insull Esq
New York —

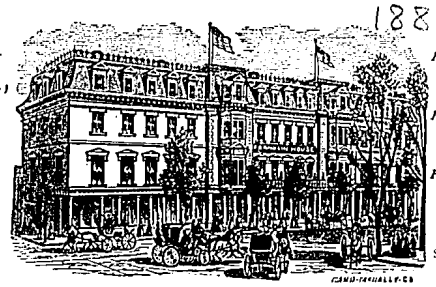
Dear Sir —

I arrived here yesterday and have seen Mr Rich & Mr Ford The former left for Fall River this morning — and will return here on Saturday There is much to be done here before we can get things going — Cannot you let Conant come on right away, and send Someone else to Thamokin just to take charge there till they settle up —

1883-10-11

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.

A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

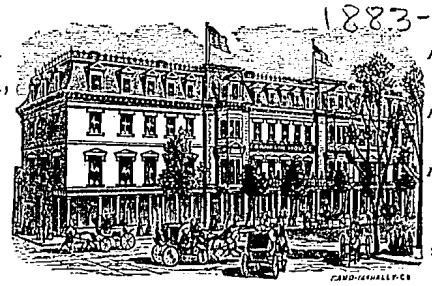
Lawrence, 1883.

Everything is in good order and I think that Brock the ~~Engineer~~ Electrician should be pretty well posted by this time — I was at Rockton on Sunday — They have a nice little Station there but I like Thamokin Station better — I will write again tomorrow and report further

Very truly Yours
W. S. Seaver

1883-10-11

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.
A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

Lawrence, Oct 11th 1883.

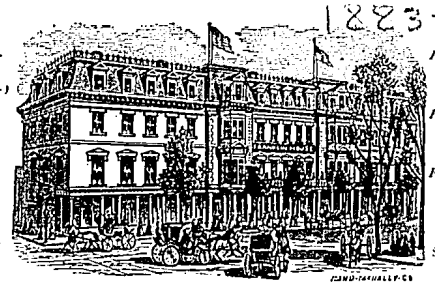
Thos Edison Esq
New York

Dear Sir,

The Shawsheen people are very anxious to have their Opera House lit up – They propose to have a switch on large Electroliers in auditorium which will put out all lights but one in center foot lights also to be governed by switch – no regulator Three rows of border lights 16 in each row – Regulator for each row – They want estimate on regulators

1883-10-11

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.
A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

Lawrence, 1883.

About 100 lights in all – Will this number of lamps tapped off at this spot affect the lights beyond? or were mains calculated for this? –

If you think fit you might write to Conant or Brock on this matter –

I want Conant on call to me at Lawrence just as soon as he can be spared

Very truly Yours
W. S. Feeder

50 lamps on Red & 50 on Blue at Shawsheen Opr House

1883-10-11

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
NO. 65 FIFTH AVENUE,

Franklin House
Lawrence Mass
~~New York~~, Oct 11 188 3

Thos. A. Edison Esq
New York

Dear Sir —

Your letter of yesterday's date to hand I have never undertaken to order any material for Central Station work — Either verbally or by letter, excepting through your office and I am fully alive to the confusion that would result from such an unbusiness like proceeding — I enclose a letter from Mr Chamberlain, that may perhaps explain this matter When I called at Bergmann's last

1883-10-11

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
NO. 65 FIFTH AVENUE,

New York, ... 188

Monday, they were about to pack the two ampere meters referred to, and I was asked if they were to be directed to me — As I was not going back there, I told them to direct to Mr Conant —

If these Ampere meters have been forwarded to Shamokin by mistake I am of opinion that the Comp.y there would be willing to keep, and pay for them

Very truly Yours,

W. S. Andrews

1883-10-12

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
200	Cok	gka	409

Received at **852 BROADWAY.** Oct 12 1883.

Dated Brockton Mass

To T A Edison 65 5 ave

Maps left by the six thirty train last night

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-12

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.
This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
1493	Sx	Gk	12 paid mn

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Oct 12 1883.

Dated Brockton Mass 12

To T A Edison 65 Fifth Ave NY

Particularly request Johnsons telegraphic recall through the obstinate meddlesome unreliable compliance necessary

Sprague

Form No. 1.

1883-10-13

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
46	Cv	Cm	Collect	4.50

Received at **852 BROADWAY.**

Dated Oct. 13 1888.

To Thos A Edison

65 - 5 One

I await instruction where next answer

J H Campbell

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Oct 13/83

J. R. Campbell

awaits instructions

1883-10-16

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York~~, Oct 16th 1883

Samuel Insull Esq
New York

Dear Sir

Your favors of the 15th inst to hand, and contents all noted. We are getting on pretty well with Station here, and had the current on two A Dynamos today, I think we can make a very neat job of it all through. I will write and report further progress in a day or two.

Thanoksin people do not want to go to too much expense on their Theatre job They proposed to put out foot lights, and Chandelier in auditorium with a switch and use no regulator, but I think that the effect would be much better if the lamps were turned down to dull red when

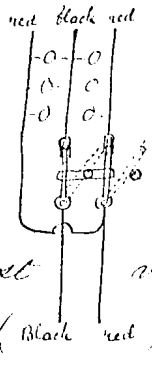
1883-10-16

Form I.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

not wanted. This could be easily and cheaply done by means of a simple switch, which would first connect them singly across either black & red or black & blue, and then by a single movement put them in series of two across same lines thus:—



This arrangement would by a single movement bring lamps from full incandescence down to dull red and would cost very little. For border lights of course a regulator would be wanted to produce effect, but I have no notes with me, to give me figures for resistance req^d. I will try to get these and as soon as possible will send you some sort of sketch with figures.

Yours very truly
W S Andrews

1883-10-18

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

[illegible] 1883

Address reply to [illegible]

RECEIVED
OCT 20 1883
ANSWERED
October 23 1883
FILE No.

[illegible]

Dear Sir

Yours of the 16th at hand by mail. [illegible] you refer to attorney Stickels but as there was no Patent [illegible] I not be obliged to refer it to [illegible] [illegible] - I understand [illegible] that a [illegible] can be placed in the boiler with advantage of [illegible] the heat of boiler but further than that it is of no use [illegible] the Mundet Dome can be placed on top as we always do and through which a Steam pipe can be used in a very important way to clean the soot from the outside of the tubes - if you bend instead to use the Mundet Dome we think always recommending the boiler than other is more

1883- 10 Form 18

THOMAS A. EDISON,
Central Station, Construction Dep't.
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

2

Address reply to.....

.....188

the Steam Horse – I [illegible] to put them in July wall
Opening in the Engine room or the [illegible]
would be cured with Steel if we attempted to use them –
hoping to see friendly and the Sketch to be
Yours very Truly W. D. Rich

1883-10-19

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
37	Co Am	13 pd	

Received at 852 BROADWAY. Oct 19 1883.

Dated Brockton Mass

To A. Edison

65 Fifth Ave

Please telegraph fully if Mr Edison is coming here or going anywhere soon

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-19

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
19	Co Am	10 pd	1015

Received at 852 BROADWAY. Oct 19 1883.

Dated Lawrence Mass

To Saml Insull

65 - 5 Ave

Where is Mr Edison now

Where will he be tomorrow

W. S. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-20

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
15	Cash	26 Pd	1000

Received at **852 BROADWAY.** Oct 20 1888.

Dated Fall River Mass 20

To Saml Insull 65 v. ave

Skates recd. The point in question is not shown see my letter of the eighteenth for further explanation you refer to flues I to Cleaning doors

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. W R Rich

1883-10-20

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

New York Oct 20th 1883

Address reply to [illegible]

[illegible]
65 Fifth Avenue N.Y.

Dear Sir

Your favor of Oct 19th enclosing sketch of boiler house connection will place this in perfect shape on the original plan but there seems to be a misunderstanding somewhere - I am not thinking about any thing but the side cleaning doors on the side of boiler next to the outer wall. The boiler is a double furnace and there is no way to get at the substance by the top manhole - the stem foundation of of Roiling is complete and the brick work is started of Nothing further is said I should proceed to erect Boiler part of flue collapsed - you make no mention of my letter of Oct the 18th - I sent you a telegram yesterday - the first 7 weeks I can make no sense of

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.
1882-10-20
188

Address reply to

[illegible] to Boston tonight and will [illegible] to show all bills sent in [illegible] as soon as [illegible] and can [illegible] they are correct [illegible] Also find [illegible] [illegible] 60668
14 58
621 48

[illegible] Notice for [illegible] work
1554 04

The letter Saturday explains
Three points
Confirmed

1883-10-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
487	W	Dy	3PM	

Received at **852 BROADWAY.**

Oct 22 1883.

Dated Brockton Mass

To Thos A Edison

65 - 5 Ave

Iffin received this noon left this afternoon by New York & Boston Dispatch two determinations one old feeder enlarged, same mains other two feeders new mains will

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-22

THE WESTERN UNION TELEGRAPH COMPAN

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the follo
Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for er
in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing wit
after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager.

NORVIN GREEN, Pr

NUMBER	SENT BY	REC'D BY	CHECK
489			

Received at **852 BROADWAY.**

Oct 22

Dated

To duplicate figures tonights mail
Danbury overhead or under ground

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
374	H	R	16 paid

Received at 852 BROADWAY. Oct 24 1888.

Dated Fall River Mass 24

To Saml. Driscoll

605 - 5th Ave

Please hurry up bed plates for Engine Have you sent one Broughton Lubricator with you

Yr Lawrence J. D. Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-24

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York October 24th. 1883

E. H. Johnson, Esq.

292 Avenue B, City.

Dear Sir:-

Referring to the attached letter from Mr. Andrews, Mr. Insull requested me to submit to you that portion of the letter which refers to safety catch thumb nuts.

Will you kindly let me know what reply I shall send to Mr. Andrews.

Very truly yours,

A. O. Tate

Enxlosure, B.

[illegible] Thanks
[illegible] to make [illegible]
[illegible]
[illegible]
[illegible]

1223-10-24

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Goshen Oct 24th 1883

Address reply to Goshen Orange Co

Samuel Gorsuch Esq
65 Fifth Avenue N.Y.

Dear Sir

Yours free of the 20th came duly to hand. Mr Edison leaves for N.Y. on Tuesday, all of which I have anxiously waited to offer — we expect Hatchings for Brick for the Boiler which came with the Boiler and Openings to suit to form Fire Grate or Furnaces are have already lost more than half the Coal which we have dared to burn on them — all the Boilers have been supplied with grates suitable for that purpose — So in my Opinion Babcock & Wilcox Schorch furnish the Heating Pipes free of Cost — we can return the others if they wish as they are not suited and are of no use to us —

The work of this Place is progressing rapidly we using the Arc light to get in full time

Yours

Yours has been started on the Cement foot friday and is working splendid — the Small Engine is now being put on its foundation and my Thing will be completed this week — I send thanks all bills I cannot do it before as there is quite a [illegible] charge for Coke, work which must be

1883-10-24

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

188

Address reply to

Will be arranged with the Steel — you have not acknowledged receipt of Dry Kill Oct 8th & Oct 13th

Freight on all goods here will have to be paid anything as the freight Agent says his Orders from the Co are positive — Please Send Cheque for freight & labor so as I shall receive it on Friday Morning the amount required will be about $750.00

Very Truly Yours
W. D. Rich

Form No. 1. 5 1883-10 25

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
50	Co		

Received at **852 BROADWAY.**

Dated Brockton Mass 25 Oct 1883

To T A Edison 65 5th Ave

Please send one determination and three new Charts St Louis will return as many determinations protest against putting down Conductors on Menlo Park determination if done

Send Mr Phillips with Light Card

Mar 27 1882

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-25

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK

Received at 852 BROADWAY.

Dated Oct 25 1888.

(2)

To

Same trouble as at Pearl St Certain feeders taking abnormal load Catches Carrying away followed remedy by failure of remaining feeders on which load is suddenly shifted is danbury underground Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Telegram Sprague
Kameing Undersigned mail Map
today to Honorable Colfax
R.

This is telegram Sprague refers
to in his letter.

Date

71

Cotton 2 5 P 8 8

Gen. J. Sprague
Kansas City Mo
Kansas

requests charts &
10 thermometers
of St Louis Mo,

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

1883-10-[illegible]

W. D. RICH,
SUP'T OF CONSTRUCTION.

[illegible] 1883

Address reply to [illegible]

Samuel Insull Esq
65 Fifth Avenue N.Y.

Dear Sir

I arrived at Sunbury on Monday and say the
is now contracts I have most of the poles and will be able
to furnish them to you by Saturday next —
also at Hamilton and made arrangements to have the
Drip from Sunbury pipe fitted and they are supplying
smoothing bars for the 500 light [illegible] —
[illegible] for boxes at once and
also to pick up freight and Sober Field Jan and at Sunbury
if possible send it by [illegible] night next —
this hurrying will also all under cover by Saturday
next - and shall intend be able to start the machine by
Nov 20th —

yours truly

W. D. Rich
Supt

1883-10-31

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Personal

Lawrence, Mass. Oct 31st 1883

Dear Insull

I wish you would kindly tell me if there is any chance of Van Conant coming on here soon — I left a gold watch in Shamokin, and wanted him to bring it to Lawrence with him — but if he is not coming soon, I will get him to express it

Very truly Yours

W S Andrews

1883-11-01

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
755	Ag	Cm	50	

Received at **852 BROADWAY.** Nov 1 1888.

Dated Fall River Mass

To Sam'l Insull

No 65 Fifth Ave

Will be there at noon

W. D. Rich 188

RECEIVED NOV 1 1883 ANSWERED

FILE No.

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-05

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
54	Co	Cm	10	pd

Received at **852 BROADWAY.** Nov 5 1888.

Dated Fall River Mass

To Samuel Insull

No 65 Fifth Ave

Will leave here Tuesday noon for Tiffin O by way of Albany return Thy. Snly ~~can~~ send papers direct to Tiffin

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. W. D. Rich

THE BRUNSWICK,
BARNES & DUNKLEE
BOSTON.

Bellin Guy Johnson Mr

1883-11-07

Nov 7th /83

Thos A. Edison Esq.

Dear Sir,

Enclosed please find expense acct to date.

Mr. ~~Oakley~~ Oakley did not stop in Brockton on acct of lack of time. But I spent Sunday in Lawrence & saw him there. A point we struck me forcibly while there was the difference in drop on the feeders at Brockton & Lawrence. At Brockton the lamps on the machine are so much higher than the circuit lamps that when the latter are at ten candles those on the machine are

certainly 16 candles, so that we never have them lighting when running. Whereas at Lawrence, the difference between those on the machines & on the circuit is scarcely perceptible to the eye & both lamps are 103 volt lamps, that is this is not due to the placing of a high volt lamp upon the machine. Furthermore they have a much heavier load than we do at Brockton.

I have made a photometer room at Brockton & am now in Town to buy a candle balance for the local Company. I think that the meter dept ought be supplied with facilities for photometric measuring as otherwise it

THE BRUNSWICK,
BARNES & DUNKLEE,
BOSTON.

1883-11-07

is difficult to make accurate comparison between gas and the lamps & also difficult to tell when the lamps are just at candle-power.

I can purchase a good candle-balance specially made for photometric work & originally sold by Messrs Fairbanks for $40. for $10. something less than $10.

This being because they have but three left & have such slight call for them. These balances are not made now in this country except by special

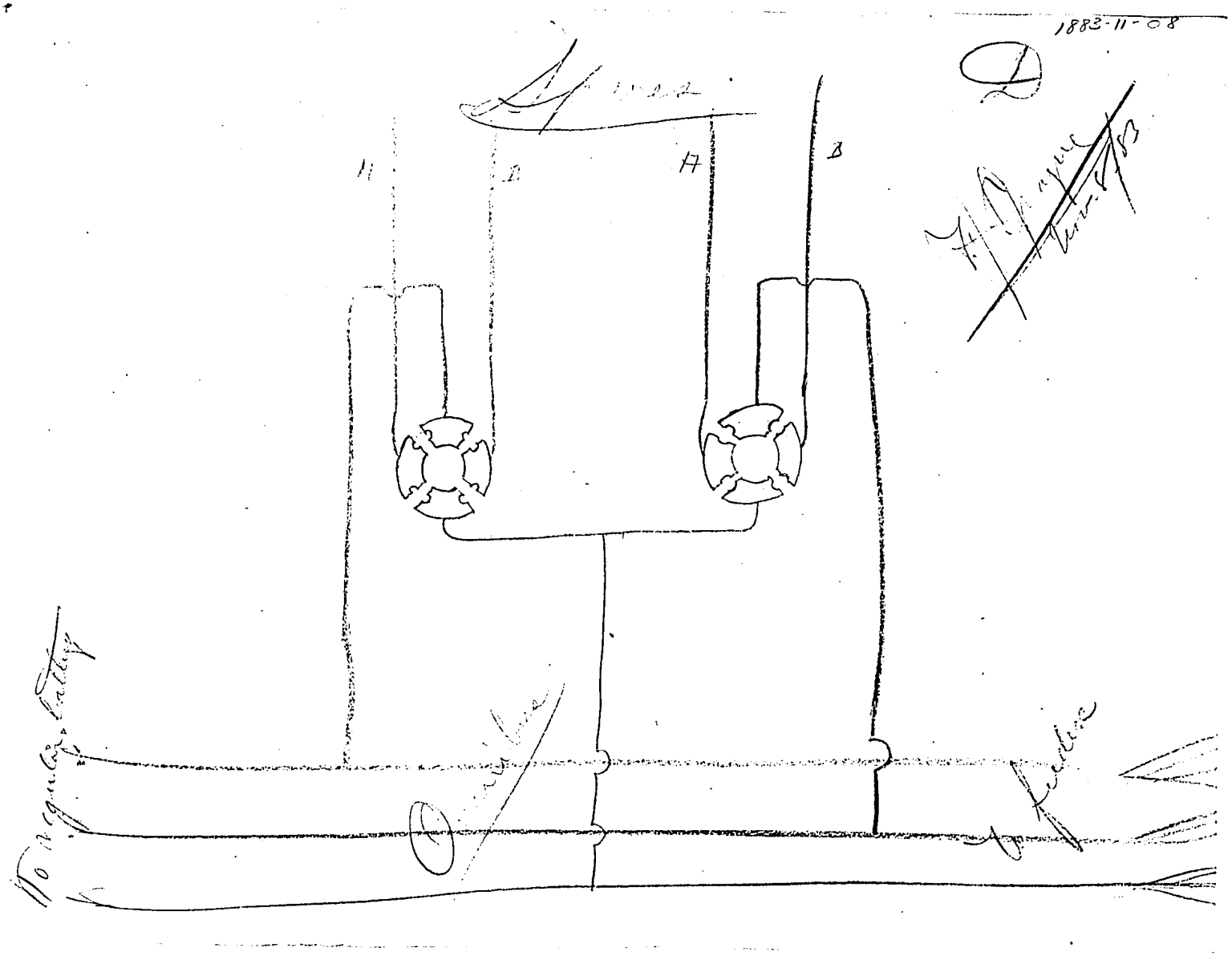
order & therefore I consider this a great bargain. Unless I hear from you to the contrary I shall purchase one of these balances & take it with me at each future station & think it will soon prove its value.

Am in hopes that you will call me to N.Y. as I wish to do some work on the water for which I have no facilities ~~here~~ in Brockton.

Yours very truly

Howard Leonard

1883-11-08



64

W. S. Andrews

Enclose Plans

Form No. 1.

1883-11-10

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
572			80d	76

Received at 852 BROADWAY.

Dated Buffalo Nov 10 1888.

To Sam Insull

65 Fifth Ave

Will be in New York Sunday night ten o'clock

N. D. Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-10 Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 10 1883.

Dear Sir:

I have to acknowledge your reference to Mr. Andrews letter of the 5th inst in RE connecting up spare dynamos in central station.

The switches shown will no doubt do the work intended but they will do so much better if handled when the machines are at rest, or with their individual switches open. I do not like the use of 3 varieties of switches which are arranged will demand too much thought and rapid use

1883 11-10

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

of the switching to limited electrical knowledge of the local engineer — I think the handling of switches should be as simple as possible, and their manipulation as quickly and as surely accomplished — This will not be the case if plug switches are used, for they will be terrible when the shifting must be done with the current on — both in regular work or in case of accident, and in the latter case the

1883 11-10

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

will be sought to demand the attention of the engineer without adding to the possibility of confusing him with a number of switches.

In my own practice I prefer the arrangement shown in Sheets E and F accompanying, where two of Mr. Andrews' double switches are used. They allow rapid, certain, and simple manipulation, and I think that once either dynamo can be handled in any possible connection

1883-11-10

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

by using this much more readily and certainly than by any arrangement of plug switches, that it would be better to put them in —

I append several plug arrangements using 3-way and 4-way plug switches —

Very truly yours,

F. J. Sprague —

[TO J. R. CAMPBELL?]

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

1885-11-13 Form H.

RECEIVED
NOV 13 1885

New York, ... 188

..... 188...

FILE NO.....

Campbell Prentis gave us 50% disc. on Broughton Lubricators making cost $8.00 net while Begg's only allows 25% disc. making cost net $12.00 —

Something should be done about this at once or our estimates will be out —

Tate

Form No. 1.

1883-11-15

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
310	GB	W 15	Ja

Received at 852 BROADWAY.

Dated Fall River Mass Nov 15 1888.

To Parker Insull Co - Boe.

Cheque all right will be in my Sunday morning go to Mr Carnel in the Evening

W D Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-15

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 15th 1883

Thos. A. Edison Esq
New York —

Dear Sir

When in New York I asked Mr Insull for a copy of Answers to Dynamo Questions, but he informed me that he could not supply them unless I obtained an order from you — If I am to instruct local Engineers in the running of Engine Dynamos I think it necessary that I should have a copy of these Answers that has been authorized

NO. 60 FIFTH AVENUE,

New York, ... 188

for yourself — Of course I could re-write all the answers I sent in, but it is probable that you have had to correct some of these, — indeed I now know some of my replies were partially incorrect —

Will you send me these answers, or shall I draw from my "inner consciousness" when instructing engineers ?—

Yours very truly

W. S. Andrews

1883 - 11 - 15

1883-11-15

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Laurence Mass
~~New York~~, Nov 15th 1883

Saml. Insull Esq
New York

Dear Sir —

I have looked up all the material that will not be wanted for this Station and shipped it to Fall River —

In addition to the list of material for Fall River, that I gave to Mr Sate, will you kindly see that the following is sent on to that place as soon as possible —

(407) 5 or 6 coils of large Copper wire 450/1000 inch diam.

(408) 12 pieces of flexible cable of suitable size for the four feeders there and each about 4 feet long —

(409) 10 lb No 14 and 15 lb No 18 white insulated wire

1882-11-15

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Please let me know immediately if I am to remove permanently to Fall River just as soon as possible, or whether I shall adopt the plan suggested in my last letter —

I have sufficient large copper wire here to connect up a spare dynamo, when they come,

Let me have Doubleday here in Lawrence on Saturday morning if possible

Very truly yours,
W. S. Andrews

1883-11-15

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 15th 1883

Saml. Insull Esq
c New York

Dear Sir

On arrival at Lawrence I found everything going on well — I stopped at Fall River on the road, and Mr Rich informs me that the Station there will be ready for my work by Monday next — but I do not think it quite wise to leave this place entirely yet I should like Mr Doubleday to see our Lawrence Station, and think the best plan will be for him to come on immediately to this place,

1883-11-15

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

And on Tuesday next, I will go with him to Fall River — and stay there a day or two with him — giving him full details of plans &c — I could then return to Menlo for a few days, then leave this place finally and go to Fall River until that plant is started satisfactorily — If these plans — meet with your approbation, please send Mr Doubleday on immediately

Yours very truly

W. S. Andrews

1883-11-16
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Bitter ace Clarke
about Chro. glue &c —
do. about the
amperes —

New York, Nov 16th 1883

Saml. Insull Esq —
New York

Dear Sir —

With regard to meter chemicals; the marine glue does not seem to work well — It smells strongly of benzine, and is, I think, of inferior quality — I have therefore made some from pure rubber and shellac, bought here — You sent a small phial of something that was labelled "Chloroform", but the glue positively refused to be dissolved by it, so I bought a pound of good chloroform here — I would not send less than a pound of this material to any station — but it must be good & strong

1883-11-16.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

I hope you will send on to Fall River, without delay, the large and small Copper wire that I wrote about in my letter of yesterday

When is the ampère meter to be returned to Lawrence? It ought to have been shipped long ago, as it was re-tested at Grand St. the early part of last week

Yours truly
W. S. Andrews

Please do not forget that another "Andrews" Switch is wanted at Lawrence

1883-11-17

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 17th 1883

Saml. Insull Esq
c New York —

George Clarke Mgr
at Goerck should
make the up

Dear Sir

I wrote to you yesterday complaining of the quality of the varnish glue sent here — I think it is made of gelatine & shellac, instead of pure white — I would suggest that you have one gallon of this material made up by proper chemists in New York, and properly tested there — and then send it, & that or part of same to different stations — Much time and material is wasted in experimenting at every station now, in order to get at real sign of —

Yours truly
Th. A. Edison

1883-11-20

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 20th 1883

Dear Sir

Your favor of the 19th inst to hand and I am pleased to learn that prospects are so good —

I am anxiously waiting for the blue prints of Mr Mallon's Patent Commutator

I will send out list of electrical material needed — These prints were detained at Newark P.O. for insufficient postage and a fee was paid to have them forwarded by special messenger

I have 1 lamp (Cap 2) but the prints have not come up yet — Your telegram just to hand, and I have answered same — It is very annoying to be

1883-11-20

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

[illegible] Sundays — I think I may [illegible]
to Fort [illegible] in a day or two and then
take Doubleday and Perry with me
I will telegraph to you when I go, and
then you can send off the young
man you write about, to me, at
Fort Plain — I would be waste of
money to send him on to Lawrence
right away, as he would have to return
to Fort Plain to see —

Mr Perry I think is
[illegible] should have some remuneration
He will make you a good man in
a short time, when he has had a

1883-11-20

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

[illegible] I think he is not afraid of putting his hands with hard work when necessary. He and Doremus may make a good team. I will give the young man you are going to send us as much instruction [illegible] to [illegible] —

I wish the Lawrence Co would order on two more H Dynamos, saying that they may have to wait some time for the second one. These night [illegible] & [illegible] look upon as a [illegible] like this —

Very truly Yours

T. A. Edison

Form No. 1.

1883-11-20

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
148	Co	Cm	20 Pd

Received at **852 BROADWAY.** Nov 20 1888.

Dated Lawrence Mass

To Saml Insull

65 - 5 Ave

Blue prints of Tiffin Hazelton and Mount Carmel not yet recd. Insufficiently prepared hence delays will attend immedy on receipt.

M. S. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.
DIRECT WIRES.

Form No. 1.

1883-11-21

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
156	Co	Cm	60 Pd

Received at **852 BROADWAY.** Nov 21 1888.

Dated Lawrence Mass

To Samuel Insull

65 Fifth Ave

Send plans right away to Lawrence

M. S. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.
DIRECT WIRES.

1883-11-21

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Tell Andrews about safety catches on Laurel House

~~New York,~~ Nov 21st 1883

Frank Insull Esq
c/o New York Aerial Lines

Dear Sir

Your favors of the 20th inst. to hand I have always made it a special point to place all instruments used in measuring current as far as possible from fuse supports. — This fact you may note in Tunbury — Shamokin, and Lawrence — Blue-prints of Bellefonte, Pa to hand and I send on another sheet a list of material that will be wanted for the inside of Station. — I have laid out on the Blue print ~~here~~ the place for Regulators, Switches &c — Do you want this plan returned to New York, or shall

1883-11-21

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

I keep it for future reference myself! —
If you want a plan of the [illegible] station
of Switches & Regulators &c of each Station
you had better send the Blue-prints of
Stations in Duplicate, as I should like to
keep a copy for my own use and whenever
[illegible]

Yours Come & Hand

Very truly Yours
M. S. Sudrow

Shall make out my list on the assumption
that Bellefonte is wired on the pole system
If it is underground - of course leave out light
protector — Please state in future if the
lines are overhead or underground

1883-11-22
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass—
~~New York~~, Nov 22nd 1883.

Saml. Insull Esq
New York—

Dear Sir

By last mail I sent lists of electrical material required for Central Stations at Tiffin—Hazleton and Mt Carmel— I have estimated the number of lamps requisite for the lighting of station and included on list everything that will be necessary for fitting up inside— The estimated wgt. of different sizes of wire are drawn as nearly as I can figure, but it would not be amiss when shipping supplies, to send a little excess of wire, as, if any is left over from Station, it can be used up in wiring dwellings—

I think it is hardly necessary for you to send me the plan or map of the different towns— If you send the blue print of station and mark thereon the number of feeders, and whether the system is overhead or underground I can work out what material will be required.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

2

1883-11-22 Form L.

New York, ... 188

I wish to enquire if I can have the feeders brought into Stations at any place that I may deem most desirable – I may be able in some cases to save considerable wire inside Station if I can do this –

I have the blue prints of four Central Stations – Bellefonte – Hazleton and Mt Carmel in Pa. and Tiffin in Ohio – and I have figured the various weights of wire on lists sent in on the assumption that I can have feeders brought in at most convenient position for internal arrangements –

Will you kindly send me another print of each of these Stations, and then I will mark out proposed position of regulators, switches &c and return to you, – and will also mark where I want the feeders brought in – I think it only right that you should have a print with these particulars marked thereon ——

1883 11-22

Form L.

3

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

In reply to your telegram concerning large wire for Fall River I have just asked you by wire to ship 340 lbs of No. 00. diam = .38" instead of 240 lb of No. 0000 - diam .45" - This is probably more than I shall require, but it will be far better to have some over than to be kept waiting - In the event of your being able to get this smaller wire at once - I shall use two of this size in place of one large wire -

The marine glue came safe to hand today and Mr Leonard telegraphs that he will be here at Midnight, so I trust that the main business will take a fresh start - Oakley has been away for two days sick with neuralgia -

It will not be much use for me to go to Fall River this week now - Get the wire off so that it will be there on Monday next if possible, and I will go down on that day with Doubleday and Perry, and we will push things through - I will come on to New York probably on Wednesday before Thanksgiving

Very truly yours
W S Andrews

1883-11-22

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass

~~New York~~, Nov 22nd 1883

[illegible]

[illegible]

[illegible]

[illegible]

1883-11-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

RECEIVED NOV 22 1883 ANSWERED

NUMBER	SENT BY	REC'D BY		CHECK
57	Ch		30 pd Nov 22 1883	919

Received at 852 BROADWAY. FILE No. Nov 22 1888.

Dated Black Creek Junction Pa

To Saml Insull 65 = 5th ave

Foundations of Buildings both at Hagleton and Mount Carmel will be Completed this week poles will be at Tiffin Tuesday will be in Bellefont tonight has Boilers gone to Tiffin answer

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. W D Rich

1883-11-23

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
355	Ug	W	11 pd	12

Received at 852 BROADWAY. Nov 23 1888.

Dated Bellefonte Pa 23

To Saml Insull 65 — 5 Ave

Send letter here no plans rec'd yet am delayed on account.

W D Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-23.

Lawrence Mass
Nov 23rd 1883.

Saml. Insull Esq
New York

Dear Sir,

By last mail I returned to you the Blue prints of Joffrin, Hapleton, Bellefonte, and Mt Carmel Central Stations and you will see how I propose to arrange Switches, Regulators &c – and also where I should like to have the feeder brought into Stations, if possible –

Very truly Yours
M. R. Andrews

Let me see the
E

1883. 11-24.

Good Idea

Lawrence Mass
Nov 24th 1883 —

Saml. Insull Esq —
New York

Dear Sir —

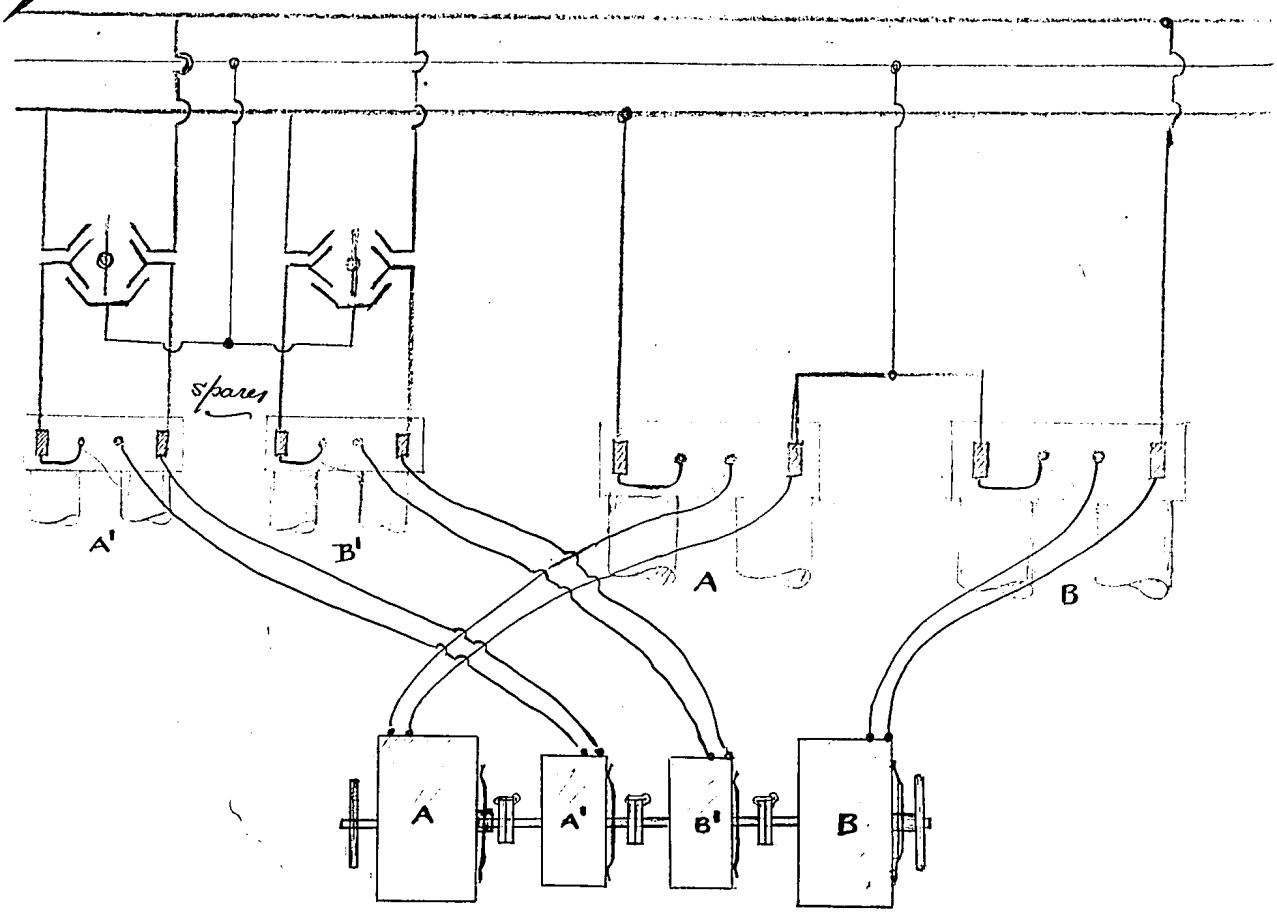
In relation to Central Station matters I think it would be a good plan if Mr Hall could keep informed, either through your office, or personally, as to the state of progress of the different stations, and the probable time when they will be ready for my work — I should thus be able to lay out my plans beforehand and lose no time.

Please let me know if this matter can be arranged —

Yours very truly,
H. L. Andrews

W S Audrey
Nov 24/83

1883-11-24.



1883-11-25

Lawrence Mass
Nov 25th 1883.

Saml. Insull Esq
New York

Dear Sir

The duplicate prints of Central Station to hand this morning. I have now rec'd all that were sent out from your office so I have two copies of each now in my possession – Hope you rec'd those that I returned last week all right –

I shall leave this morn for Fall River and take Doubleday and Perry with me I shall leave directions with Doubleday concerning Fall River Station, and come on to New York tomorrow (Tuesday) evening by boat, so that I shall probably see you at your office on Wednesday morning –

I have desired Leonard to give attention to Electrical matters here during my

1883-11-25

absence – If the span dynamos for Lawrence are sent off from New-York this week – I shall try to get up here early next week and finish up all connections. –

As I shall see you so soon, I will leave other matters for the present –

Yours very truly

W. P. Andrews

[TO C. H. CAMPBELL?]

1883-11-28

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

RECEIVED
NOV 28 1883
ANSWERED

NEW YORK, ... 188

..... 188...

FILE No. .....

Campbell / When Sawerstraw estimate is ready please have prepared statements profits & daily running expenses — Coal 3.30 per Ton "

Tate

Make

OK 12/31/83

1883-11-29

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
144	Co	Cm	21 Pd	

Received at 852 BROADWAY.

Dated Fall River Mass Nov 29 1883.

To Saml. Insull

65 - 5 ave

Leave here for tizzin tonight Will be there Saturday Send Cheque for five hundred all accounts forwarded to you by Express

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

W. D. K.

Fall River Nov 29th 1883

Samuel Insull Esq
65 5th avenue N.Y.

My Dear Sir

With many thanks both to Mr Edison and yourself I hereby beg to acknowledge receipt of your esteemed favor of November 21st advising me of the $500.00 which has been placed to my credit as a remuneration out side of salary - and at the same time one more than placed to Know that my services are appreciated and while in your employ shall ever stay to promote your interest to the best of my ability - for the present plans but the and remain as a friend -

With many thanks for past favors I remain very truly Yours

C. D. Reich

Form O.

No. General Expense Engineering and

For the Year 188 1883

To THOMAS A. EDISON, Dr.

CENTRAL STATION, CONSTRUCTION DEP'T,

65 FIFTH AVENUE, N. Y.

	Utica - N.Y.	10	days	145	60	Pay 58.23 Pay 86.77
	Watertown Pa	6	"	87	36	" 53.21 " 32.79
	Erie Pa	11	"	160	16	" 97.41 " 62.59
	Hartford. Conn	15	"	218	45	" 132.28 " 85.17
	Davenport. Ia	6	"	87	36	" 53.21 " 32.79
	Danbury - Conn	7	"	101	92	Pay 61.73 Pay 40.19
	Southington	7	"	101	92	" 39.73 " 62.19
	Neenah - Wis	3	"	43	68	Pay 26.04 Pay 17.64
	Haverhill - Mass	8	"	116	48	" 71.04 " 45.44
	Norwich - Conn	8	"	116	48	" 71.04 " 45.44
X	Williamsport. Pa	13	"	189	33	" 115.64 " 73.69
	Racine - Wis	8	"	116	48	" 71.04 " 45.44
	Natick - Mass	7	"	101	92	" 62.19 " 39.73
	San Jose de Guatimala	4	"	58	24	" 35.60 " 22.64
	Danville - Pa	7	"	101	92	" 62.19 " 39.73
	Evansville - Ind	10	"	145	60	" 88.83 " 56.77
	Charlestown	10	"	145	60	" 88.83 " 56.77
	Buenos Ayres	6	"	87	36	" 53.21 " 32.79
	Lowell - Mass	15	"	218	45	" 132.28 " 85.17
	Government Island	6	"	87	36	" 53.21 " 32.79
	Llewellyn Park. N.J	8	"	116	48	" 71.04 " 45.44
	B.R.R Depot	15	"	218	45	" 133.28 " 85.17
	St Louis - Mo	45	"	655	40	" 399.88 " 255.52
	Canon of Arkansas	10	"	145	60	" 88.83 " 56.77
X	Shamokin Pa	8	"	116	48	Pay 46.44 Pay 71.04
X	Brockton - Mass	8	"	116	48	" 46.44 " 71.04
X	Lawrence - Mass	7	"	101	92	" 40.43 " 61.49
X	Sunbury - Pa	8	"	116	48	" 46.44 " 71.04
X	Fall River	13	"	189	33	" 73.58 " 115.75
X	Bellefonte	15	"	218	45	" 85.25 " 133.28
X	Middletown O	12	"	174	77	" 68.12 " 106.65
X	Piqua O	12	"	174	77	" 68.12 " 106.65
	Louisville - Ky	25	"	364	10	Pay 142.47 Pay 221.63
	carried forward			5140	35	[illegible]

Form O.

188

Mr. .....

To THOMAS A. EDISON, Dr.

CENTRAL STATION, CONSTRUCTION DEP'T,

65 FIFTH AVENUE, N. Y.

9	Brought forward	5140	38			
Newburg	15 days	218	43	Per 133.26	Exp 98.84	
Jeffers	12 "	174	72	" 106.56	" 65.16	
Hazleton Pa	4 "	58	24	" 35.52	" 22.72	
Mt Carmel	4 "	58	24	" 35.52	" 22.72	
Mendota	8 "	116	48	" 71.04	" 45.44	

Approximate Time of Estimates Below

Engineering Dept.

145.60	Utica NY	10 days	
87.36	Watertown Pa	6 "	
160.16	Erie Pa	11 "	
218.45	Hartford Conn	15 "	
87.36	Davenport Ia	6 "	
101.92	Danbury Conn	7 "	
101.92	Southington	7 "	
43.68	Nesquehoning Pa	3	
116.48	Haverhill Mass	8	
116.48	Norwich Conn	8	
189.33	Williamsport Pa	13	
116.48	Racine Wis	8	
116.48	Mendota	8	
101.92	Natick Mass	7	
58.24	San Jose de Guatamala	4	
101.92	Danville Pa	7	
145.60	Evansville Ind	10	
145.60	Charleston S.C	10	
87.36	Buenos Ayres	6	
218.45	Lowell Mass	15	
87.36	Goose Island	6	
116.48	Cliffwood Park N.J.	8	
218.45	P.R.R. Debit	15	
655.80	St Louis Mo	45	
145.60	Canons of Artaxerxes	10	
~~3683.98~~ 3684.08			

	Shamokin Pa	116.48	8 days
	Brockton Mass	116.48	8 "
	Lawrence Mass	101.92	7 "
	Sunbury Pa	116.48	8 "
	Fall River	189.33	13 "
	Bellefonte	218.45	15 "
	Mt Vernon O	174.77	12 "
	Pigeon O	174.77	12 "
	Louisville Ky	364.10	25 "
	Newburg	218.45	15
	Tiffin	174.72	12
	~~Hazelton~~ Pa	58.24	~~4~~
	Mt Carmel	58.24	4
			5 yr

2084.41
~~3683.98~~
~~5766.49~~
2084.41
3684.08
~~5766.49~~

Mr. Campbell

[TO C. H. CAMPBELL?]

Mr. Campbell,

1883-11-30

Have you figured out the size of the pulleys for that XXXXXXX 10 x 12 1/2 engine which I spoke to you about. I want this information badly or should not have asked for it.

S. Insull,

per G.

November 30th, 1883!

59" pulley 10" face

Engine 250 per min. - ~~2 400 (100 lb) - 62" x 10" - 12" on bye~~

~~2 250 (100 lb) - 52 x 10 - 10" on bye~~

1883-11-30 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, Nov 30 1883

Mr Insull

In relation to memo. concerning 10 x 12 Engine would say - To run our various machines with the slightest variation of speed of engine, we would need pulleys of 59" dia 11" Face

C. H. Campbell

In running two 200 (16 cp) ~~or two 3~~ light machine Engine must make 265 per min

Running two 250 (10 cp) light machine 2.65

Running two 300 (16 cp) light Machine 245.

C. H. Campbell

1883-12-02

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
NO. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Address reply to

Lynn Dec 2nd 1883.

Thos. A. Edison Constn Dept
New York

Dear Sir

I have called your attention several times to the small size of screws in clamps on headboard of dynamos. I mean the clamps that secure the main lead leading from machine. These bolts ought to be 3/8" thread, and I have been alleged to make this alteration at some expense at every station I have attended to, except Tiverton.

The leading wires are generally No. 000 and present bolts are too weak for safety.

Very truly yours

W. S. Andrews

1883-12-03 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

Fall River, Mass
~~New York~~, Dec 3rd 1883

Samuel Insull Esq
New York

Dear Sir

Would it be possible
[illegible] out the copper conductors
[illegible] Station work, in
[illegible] lengths of say 15 or
[illegible] feet?

If so, I should much
[illegible] have it this way
[illegible] instead of in coils, for the
[illegible] of faults, up would be
[illegible] much lessened

Very truly Yours
W. S. Andrews

[illegible] not care to have
[illegible] than #0 in
[illegible]

1883-12-03 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

Fall River Mass
~~New York~~, Dec 3rd 1883

Samuel Insull Esq
New York

Dear Sir

[illegible] believe there was some mis-
[illegible]standing about the crow in
8 litre ~~[illegible]~~ bottle reported from Lawrence
[illegible] was in the form of
[illegible], some of which was
[illegible] partially imbedded in the
[illegible] inside bottle

[illegible] any acid solution put
[illegible] this bottle must necessarily
[illegible] up crow

Very truly Yours
W. S. Andrews

1883-12-03

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Post Office Box 565
Fall River, Mass.
~~New York~~, Dec 3rd 1883

Oth as to material & Safety

Saml. Insull Esq
New York

Dear Sir —

Fall River Station is progressing as rapidly as can be expected considering circumstances. Carpenters, pipe fitters &c are hobbling here and there, which of course hinders the work somewhat. However we have water, no heat, and the temperature is comfortable. However, Doubleday & Perry are making the best of things and doing as well as I can expect. We are waiting for material for finishing inside of Station. Some time last of what would be wanted, but it will have to be

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

2

1883-12-03

Form L.

New York, ... 188

[illegible] back, I enclose another one herewith which, you may note, I have made some additions — I think we ought to have two ampère meters in Stations, [illegible] Lamps, one on the compound [illegible] either on red or blue [illegible] Lists, will tell us all we [illegible] just as well as three —

[illegible] go to Lawrence tomorrow to [illegible] plans for regulators for 400 C.P. [illegible] Dynamos, and attend to some other matters — Shall probably [illegible] Friday or Saturday

[illegible]

1883-12-03

Form 7.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

3

New York, ... 188

Understanding that John Ott has got out I wish very much that you would send it on to me — Some of these engines made for the new going would take the place of the Engines we have to go about, and are not cheaper

Please forward to me the Blue Prints of Newburgh Station, and also the number of feeders

Yours truly
T. A. Edison

[illegible] for Exec Room

1883-12-03

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
326	bo	K	45 Rd.

Received at **852 BROADWAY.** Dec 3 1888.

Dated Brockton Mass 3

To L A Edison 65 5 Ave

What progress with indicators shall I wait for them otherwise will leave everything in readiness can be in New York Tomorrow what is best filling for cracks in insulation between commutator blocks have tried shellac

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-03

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK

Received at **852 BROADWAY.** Dec 3 1888.

Dated

To

Mannis glue rubber soft and Vulcanized asphalto varnish but none hold

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

[TO C. H. CAMPBELL?]

Mr. Campbell,

Will you please supply me with the information I want, namely, what speed the engine should run at?

S. Insull,

December 4th, 1883. per G. R

1883-12-04
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Dec 4 1883

Mr J R Campbell:

Please get out the necessary forms for Mr Burrows for freight to Middletown & Piqua & Williamsport. These should not be rough memos but should be prepared carefully and copied in the letter book. Also issue a letter to each person you have ordered material from for Middletown and Piqua telling them to ship from New York

1883-12-04 Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

by the Lackawanna
Fast Freight Line -
~~To~~ From Providence
by the N.Y. N & RR -
See me about this first
thing in the morning.

Tate

1883-12-04

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass —

~~New York~~, Dec 4th 188

Samuel Insull Esq
Newyork

Dear Sir —

[illegible] considering my plans for different [illegible] I have thought best to make a [illegible] station — I now send you [illegible] of [illegible] for Tiffin — Middletown and [illegible] Ohio — and Bellefonte, Mt Carmel and Hazleton — Pa —

[illegible] prints of Williamsport I have [illegible] lay out plans for this Station [illegible]

[illegible] and [illegible] Lawrence Mass [illegible]

1883-12-04.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
NO. 65 FIFTH AVENUE,

New York, ... 188

Bibby was sick, and left here on
Nov 30/83 — Mr Leonard seems
to get on well with the meters, but
report fully on this trouble
suggest that some Chief
get up for our men &
expense Bills on —

am just in receipt of a letter
from "Mechrom" at Shamokin, says
the plant there is working very
well —

Please do not forget to obtain
a chart for Boston as for

[TO JOHN R. CAMPBELL?]

1883-12-05 H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,
New York, Dec 5 1883

Campbell Dont order
any thing from
Bepp - Get matl
also oil Cabinets
from Georges Place
Mach Co. We have
arranged it

TAE

1883-12-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York,~~ Dec 5th 188

Insull Esq
New York — OK E
Show this to Upton

[illegible] that I shall run the back of [illegible] separate from main line [illegible] — If the lamps are [illegible] of low volts will be of [illegible] quence, for, as you [illegible] bundle power can [illegible] down with resistance [illegible]

1883-12-05

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass.

New York, Dec 5th 188[illegible]

Frank Insull Esq
New York

Dear Sir —

Had a little conversation
[illegible] ago, with Mr Spencer
[illegible] line at Brockton with
[illegible] — He seems to be pro-
[illegible] and would prove a
[illegible] to us — I would
[illegible] that you make enquiry
[illegible] of Mr Sprague
[illegible]

[TO JOHN R. CAMPBELL?]

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, RECEIVED DEC 6 1883 188

Mr Campbell

Please give me statement showing the amount of Each Estimate we have made - Don't include any places where contracts have been closed - Want all the others -

T A E

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Andrew Carnegie Esq
Lawrence Mass

~~New York,~~ Dec 6th 1883

Thos A. Edison Const. Dept
New York

Dear Sir,

The enclosed came to hand this day from Mr Oakley — Please advise if I am still to consider myself a member of your Staff —

Yours truly
A. R. Andrews

[ENCLOSURE]

1883-12-05

Rahway N.J. Dec. 5th 1883

W. S. Andrews Esq.
Fall River
Mass.

Dear Sir:

Owing to the intense pain I was suffering and having all the pneumonitic symptoms of pneumonia, I left for home Saturday last. I am now here writing letter but by no means well. I hope in a few days to be able to return to work.

If you see fit to avail yourself of my services at Fall River, you will kindly request same at N.Y. Office I will receive due and timely notice.

Hoping you are all well, sending my kind regards to all, I remain

Yours Respectfully

S. B. Oakley.

1883-12-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

I think Leonard's form is 1st class - I saw it the other day. E. Insull

How would it do to order some in bronze...

Lawrence, Mass. Dec 6 1883

Samuel Insull Esq

Dear Sir.

I have yours of Dec 4th and will send answers to the enclosed questions in a day or so. Mr. Leonard has shown me a form of meter blank which seems a very good modification of the present system as it gives the weights to be substituted in the same vertical column instead of in a horizontal line as at present and thus does away with some chances of error. It also gives the necessary data regarding

1883-12-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

the sign meter, side of system actual number of lamps &c &c.

Mr. Leonard has already sent you a copy of this form and I think it is worthy a careful consideration. I hope to see some of the new pressure indicators shortly.

Yrs &c

Thomas P. Conant.

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass

~~New York~~, Dec 6th 1883.

Mr. T. A. Edison Constr. Dept
New York City —

Dear Sir —

[illegible] regard to time when Fall River [illegible] be ready to start. I shall be [illegible] you certain information [illegible] back there next Saturday [illegible] will be some time next [illegible] hope that we shall not [illegible] by having to wait for [illegible] Mr Doubleday wrote me [illegible] that he was waiting for [illegible]

1883-12-06

Form L.

2

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

charge of Station. Would you
any other member of our staff
with us, to leave there with Bouant
under his directions? It might
forward, as I do not suppose
able to remain there for
about a week —
the next place that will
suit to Siffin? —
reserved sufficient wire
connect up the
lines

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

3

New York, ... 188

[illegible] week to see what will be
done —

I have not yet opened the
[illegible] 145 were shipped to Sale
[illegible] will be plenty for
[illegible] there without [illegible]
[illegible], but I shall know
[illegible] off it on to Brockton
[illegible] off. I will return to
[illegible] for your directions

Yours Truly
[illegible]

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lowman Place
~~New York,~~ Dec 6th 188

T. Edison Esq
Newyork

I have heard nothing from Parkhurst he still [illegible]

Doubleday and Perry are [illegible] working at Sale Rock [illegible] Howard are here [illegible] — I propose to return [illegible] next Saty, 8th inst [illegible] leave Howard here [illegible] the electric matter

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

(9)

Lawrence Mass
~~New York~~, Dec 6th 1883

Saml. Insull Esq—
New York—

Dear Sir—
In view of the proposed alteration in connecting Banks of test lamps in different Stations, be kind enough to add

2 Plug Switches No. 990 with 3/4" Plugs

to the list of Electrical material req^d for Tiffin, Middletown, Piqua, Wm Canal Bellefontaine, and Hazleton.

Very truly Yours
H. S. Andrews

1883-12-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass.
~~New York~~, Dec 7th 1883

Thos A. Edison Constn Dept —
New York —

Dear Sir —

In reply to your favor of the 6th inst. I think it will pay to use Magnet wire for inside work in Stations from #00 (.38") and upwards — for smaller sizes than #00, wire may be sent in Coils. Cards and Arsonic Profile Sheets I have for us in 20 ft lengths as they are for Mr Geo. Ince & Co.

Very truly Yours
E. H. Johnson

1883-12-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
New-York, Dec 7th 1883

Thos. A. Edison Constn Dept
New York —

Dear Sir —

Engineer's questions came safe to hand yesterday by express, and your instructions concerning them are noted. He (Howard) wants to go to Ohio — I believe he has written to you on the subject. If so, let me know your desire in the matter —

I have no blue-print of Williamsport Station — Will you kindly inform me the number of feeders — size of cable from Station to first junction, and from junction to each Station — Yours

Andrews has they say

Dong this now

1883-12-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

information I shall be able to make
[illegible] of Electrical material [illegible]
[illegible] Lawrence to morrow morning
[illegible] Rim, and will report [illegible]
[illegible] as soon as possible
[illegible] approval —

Yours
W. S. Andrews

[TO C. H. CAMPBELL?]

1883-12-08

Mr. Campbell,

I want it distinctly understood that all the correspondence of the Construction Department is to be conducted through my office. If I am not here Mr. Tate will attend to any matters that you want to get information on. I spoke about this matter some time ago, and want you to understand that my instructions must be strictly adhered to. I have noticed a number of letters have come in here in answer to correspondence from your Department, of which I am totally unfamiliar. I this morning received from the Western Edison Light Co. blanks as to Minneapolis and St. Paul, which they returned, as they were sent to them in error. I feel very much annoyed about this matter, and hope that it will not be necessary for me to again repeat that I prefer to run the correspondence myself.

S. Insull,

December 8th. 1883. per G.

Take your instructions that leave the blanks myself, and your obedience.

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
NO 65 FIFTH AVENUE,
~~New York~~,

Box 565
Fall River Mass
Dec 9th 1883

RECEIVED DEC 10 1883
ANSWERED Dec 10/83
FILE NO.

Edison Const Dept
New York

Arrived at Fall River last evening and found several letters from you awaiting me —
Are the towns of Rigua and Westport likely to follow up their offer? —
I think it will be well for you to wait and
[illegible] to this, when I go, and
[illegible] Pennant in Charge when
[illegible] I have written to
Mr Rich asking him to let me
know when the Effie Station will
be ready for work —
I cannot consider that a Station
[illegible] to commence upon
[illegible] commenced
[illegible] the Centre, [illegible]
[illegible] Dates [illegible]
[illegible] Effie [illegible]

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

[illegible] in Fall River Station when [illegible] open, and the cold was [illegible] Moreover my men cannot do proper justice to their work [illegible] crowded up with a [illegible] of proper fitters & carpenters & I have left Conant and [illegible] Lawrence for the present Conant will take charge of setting up [illegible] connecting the Spare "S" [illegible] Station

[illegible] Holliday and Perry are [illegible] very well in this place [illegible] We have not yet come to [illegible] and we are [illegible] by the delays. I have not been [illegible] Station yet, as I only [illegible] last night. I will open [illegible] Lawrence [illegible] [illegible] I shall be [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Very truly Yours H. S. Andrews

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,
~~New York~~, Fall River Mass Dec 8 1883

RECEIVED DEC 10 1883
ANSWERED Dec 10 1883
FILE NO.

Dear Sir

[illegible] Esq
[illegible] Sprague
[illegible] Kirby. I would
[illegible] for the
[illegible] $2.00 a day
[illegible] wants $2.50 which
[illegible] pay him
[illegible] a month or two
[illegible] Laurence V. Salem
[illegible] he could better
[illegible] stay there
[illegible] the facts of
[illegible] you send Kirby
[illegible]

By the above I would simply infer that if you write to Kirby first hand he might be apt to acquire too large an idea of his own importance

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,
~~New York~~ Fall River, Dec 9th 1883

Frank Insull Esq
New York —

Dear Sir

In reply to your favor of the 7th Inst relative to Book of questions & answers I will follow your instructions and caution my men in this matter — Please inform me ~~to~~ to whom they have been given out —

Very truly Yours
[illegible]

1283-12-09 Form H.

THOMAS A. EDISON,

Central Station, Construction Dep't.,

No. 65 FIFTH AVENUE,

~~New York~~, Fall River Mass Dec 9th 1883

RECEIVED DEC 10 1883

ANSWERED Dec 10/83

FILE No.

T. Edison Constr Dept
New York —

[illegible] you kindly get Bergmann [illegible] small cheap four [illegible] similar to our regular [illegible] switch, but only [illegible] carry the current [illegible] lamps —

[illegible] would be of much use [illegible] Central Station

[illegible]

Send diagram to Scale

1883-12-09

Form H.

THOMAS A. EDISON,

Central Station, Construction Dep't.,

No. 65 FIFTH AVENUE, Fall River Mass

~~New York~~, Dec 9th 1883

RECEIVED DEC 10 1883

ANSWERED Dec 10/83

FILE NO.

Edison Const Dept
New York

Please advise of Newburgh and Williamsport Central Station. Place where tubes should be marked on Newburgh Street but not on Williamsport. Number of feeders not given on the plan. Please send this information at once. Far from size of plant that Williamsport is one complete system.

Yours very truly
W. S. Andrews

get Newburgh feeders from Programme
Wmpt not yet determined

[TO C. H. CAMPBELL]

Mr. Campbell, 1883-12-10.

How do you account for the difference in the tables sent out as to pulleys of "S" machines referred to in Mr. Andrews' letter? Please return letter with your answer to Mr. Tate.

S. Insull,

December 10th.1883. per G.

E

10" pulley when running from 9½ x 12 or
9½ x 12 - 5½" pulley to not run faster than 200

1883-12-10

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

RECEIVED
DEC 10 1883
ANSWERED
.....188..
FILE NO.....

New York, Dec 10 1883.

Dear Sir:

I enclose answer to Mr. Batchelor's letter of Oct. 18 th. referred to in sometime since —

Yours very truly —
F. J. Sprague —

1883-12-10 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

P.O. Box 565
Fall River Mass

~~New York~~, Dec 10th 1883

Thos. A. Edison Const. Dept
New York

Dear Sirs

I have already written twice for information about respecting the flow of water entering Williamsport and also the number of lamps in Williamsport and Lock Haven —

Until I hear from you upon this subject it will be impossible for me to make any plans or send you a list of electrical material required for these stations

Yours Truly
M. S. Andrews

[TO C. H. CAMPBELL?]

1883-12-12

Mr. Campbell,

Please note the attached letter in reference to Kansas City and hand it to Mr. Guimaraes, who will return it to me. I want this back with any comments you have to make as quickly as possible.

lot (50 x 100)

A. O. Tate,

December 12th. 1883. per G.

F

[TO C. H. CAMPBELL?]

1883-11- ?

Mr. Campbell,

Let me have your notes quickly in reference to this letter from Rich in reference to the setting of B& W boilers.

A. O. Tate,

December 12th. 1883. per G.

OK

1883-12-12

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, Dec 12th 1883

Thos. A. Edison Const. Dept
New York

Gentlemen

Mr Edison says that "Y" Dynamos in the Station will have to [illegible] 330 Volts to allow for 15% drop on the line. The dynamos fully loaded 12% drop and engines driven at 40. [illegible] Notwithstanding arrangements will [illegible] at 330 [illegible] dynamos [illegible] 330 [illegible] and the 330 may [illegible] allowance for 330 [illegible] will have to be altered [illegible] 14% [illegible] will surely mean that the pressure indicators [illegible] 330 [illegible] 15% [illegible] here — They may be [illegible] reliable — but I am [illegible] 350 be adopted [illegible] to say that they are certainly not [illegible] with your [illegible] Keep the [illegible] matter [illegible] Keep the [illegible] made, and

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

1883-12-12

Form H.

New York, ... 188

[illegible] fear that we shall find no [illegible] engineer or electrician [illegible] with sufficient [illegible] correct reading of the principles of the [illegible] delicacy is wonderful and [illegible] of an electrician, [illegible] place of a [illegible] but we need an [illegible] Station board that [illegible] be solid, hardy, but [illegible] and sunproof. The [illegible] Insulation [illegible] arrangement [illegible] the correct [illegible] now [illegible] drawing [illegible] made [illegible] which [illegible] a serious one [illegible] in favor of the 10th [illegible]

I think the more I look at the [illegible] with the new [illegible] better you [illegible] Yours [illegible]

Yes [illegible] 1/2 [illegible] water before [illegible] water [illegible] Edison [illegible] [illegible] them [illegible] measurement is [illegible]

Form H.

THOMAS A. EDISON, 3 1883-12-12

Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

Since that you have ordered a quantity of copper pipe (long ago) for work in Wilmington, I would like Chisonia Poole draw you this and return it to you in my hot haste for quick figuring. —

There is a wonderful growth of [illegible] here now, [illegible] in Mr. Poole's [illegible] I have confidently turned this at Pearl Street Station and you will find it yet there, please hurry it up —

We could use it if it will please you.

Shall we do it?

Yes, you can do it.

I also enclose a letter to Messrs Bergmann & Co. and if it has your approval, I would ask you to be kind enough to send it to them

Very truly Yours
M. S. Andrews

1883-12-13

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

..... 188 3

Address reply to.....

[illegible] Construction Dep't
[illegible] York

[illegible] of the 11th inst. is hand. [illegible]
[illegible] information concerning [illegible]
[illegible] course of construction [illegible]
[illegible] Spencer on a [illegible]
[illegible] instruction, and he [illegible]
[illegible] present [illegible] Superintendent
[illegible] commence on date of [illegible]
[illegible] Spencer [illegible]

[illegible] the Lawrence Co. for the
[illegible] sent to you, as being
[illegible] for lighting Lawrence
[illegible]

Very truly yours
W. S. Andrews

OKA.

Enclosure

1883-12-14

Form H, H.-1000-12-3-'83.

THOMAS A. E[illegible]SON,
Central Station, [illegible]nstruction Dep't,
No. 65 Fi[illegible]VENUE,
NEW [illegible]ORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Address reply to.....

188[illegible]

I understand the belt was cemented but not riveted as it should have been. I don't think tension due to belt was too great from experiment from which I made the single belt with no rivets. I am afraid of joint Campbell has been unavoidably late. Stop the noise. Don't you think we better use rivets.

145 amperes

Thos. A. Edison Electric Light Co.
New York

Dear Sir

Yours received with your telegram in reply to mine I received this morning about small engine belt. I have having dynamos moved back and [illegible] below, so as to lear weight — [illegible] a great mistake to make these belts [illegible] longer and are [illegible] case, if you will look at [illegible] above you will see that small [illegible] easily have been placed [illegible] further back from dynamos [illegible] gave more gripping [illegible] dynamo pulleys, and allowed belt [illegible] less tension —

Yesterday I received information from [illegible] Manager at Lawrence, that [illegible] of the 11th inst. the [illegible] of the west pair of engine in the Station [illegible], and the belt of the [illegible] allowed at the [illegible]

1883-12-14

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

.....188

Address reply to.....

Ask Campbell to put explanation in Worthington's letter to Andrews

[illegible] on the Pilgrim, they [illegible] a [illegible] and bearings for their [illegible] [illegible]. If there is any chance of the mentioned accident happening in [illegible] Stations, it would pay to take precautions —

[illegible] not as yet passed any [illegible] any letter of the 4th inst. [illegible] except the use of an 8 [illegible] [illegible] pulley — Mill and [illegible] [illegible] belt?

[illegible] are working very well. [illegible] wide bottom belt [illegible] last week — I am now waiting [illegible] and trial, they will soon [illegible]

Eh! 1 55

When are you going to send on the [illegible] Electricals? — I could be [illegible] very much if I had them [illegible]

[illegible] you a list of the [illegible] [illegible] seen and [illegible]

[illegible]

[illegible]

1883-12-14

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Address reply to 188 3

Copy this paragraph of letter to Sims at Franklin St & ask him to kindly give his views.

E

Geo. A. Hofmayer of No. 1[illegible] Ave. B left his at present running the [illegible] "Pilgrim"

[illegible] the other day, asking [illegible] was for his [illegible] [illegible] in one of our [illegible] that time down [illegible] and told him [illegible] questions in regard [illegible] then I will send by [illegible] that we may judge of his capabilities. He appears to be quite a bright young [illegible], tho all his answers are brief [illegible]

[illegible] the printed answers to questions [illegible] I found that all [illegible] were fully filled with [illegible] the answers [illegible] the [illegible]

1883-12-16

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Box 863
Pittsburgh Dec 16 188 3

Address reply to

Mr T. A. Edison Esq
New York —

I am in receipt of a letter from Mr Jackson at the Testing Room — in which he sends me a copy of a very interesting test of the Alternating Dynamo by non-spark[illegible] and he tells me that the [illegible] and as close as five Amperes by [illegible] Since your letter to me on the same time ago, I have been [illegible] on this plan, and I like the [illegible] more and more — I mean to try it this [illegible] on one of our "H" Dynamos, and if that goes well, I will put them all up the same — I feel sure that a reading on the Galvanometer as close as 5 Amperes, I should hope would be each armature its own Ampere [illegible] interpolating and in leader, as, after the Alternating Dynamo it will remain constant [illegible]

[illegible]

Yours
W. S. Andrews

1883-12-16

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

No. 563
Fall River Mass. Dec 16th 188 3

Address-reply to

Thos. A. Edison Const'n Dep't.
New York

Dear Sir

Your favor of the 14th to hand
relative to regulators for Opera House
Lighting Plant.

I have written to Mr Brock,
the Electrician in Charge of Plant, for
particulars concerning number of lamps &c
and shall attend to this matter on receipt
of reply from him.

By a letter from Mr Conant
from Lowell I understand that the fuses
blew out at that Station was due to the
water which flew off Engine when they
were endeavoring to cool off bearing —
The water saturated the leather, and loosen
the glue — I note that none of our
belts are riveted at joint — I think that
this accident points out the necessity of
having a glued joint in belts, as they
would then stand water as far as the
joint is concerned.

Very truly Yours
W. S. Andrews.

1883-12-16

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

[illegible] 188 3

Address reply to

[illegible] Edison Const. Dept
New York

Dear Sir —

[illegible] left hand driving wheel [illegible] engine. Standing with face [illegible] the governor wheel [illegible] the one that is [illegible]

[illegible] —

Very truly Yours
W. S. Andrews

Campbell

[TO C. H. CAMPBELL?]

1883-12-16.

Mr. Campbell,

Here is another complaint about non-riveted belts.

AI O. Tate,

December16th. 1883. per G.

A

1883-12-17.

C. H. Campbell.

Mr. Rich says that the injectors sent to each Station, should be accompanied by a Gate valve. I can explain this to you in connection with one of the injectors in your office, if you do not understand what I mean.

A. O. Tate.

Per. B.

December, 17th, 1883.

1883-12-17

Mr. C. H. Campbell.

We are receiving numerous complaints of non riveted belts which we are useing, one of them parted the other day at Lawrence and caused very serious trouble. Andrews thinks that these belts are not strong enough without being riveted. Rich spoke yesterday of a raw hide belt, which is made up and taned after the ends are conhected. This makes a joint that is just as strong as any other portion of the belt. You had better ventilate this subject.

A. O. Tate.

Per B.

December, 17th, 1883.

1883-12-18.

C. H. Campbell.

Please let me have a plan of the Williamsport Station for Andrews.

A. O. Tate.

Per. B.

December, 17th, 1883.

OK Dec 18/83

1883-12-17

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Buf 565
Fall River Mass Dec 17 1883

~~Address reply to~~

Personal

Dear Sale

Hope you have attended to my telegram for $100.00 — The weather has turned very cold and wintry all at once — and I want to buy something suitable for this damned New England Climate

Very sincerely Yours
W. S. Andrews

I am very busy just now between Rue and Laurence and cannot spare time to come to Y. —

1883-12-18

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
29	Co	Em	5 00

Received at 852 BROADWAY.

Dated Fall River Mass Dec 18 1883.

To Thos. A. Edison

65 Fifth Ave

Rich leaves fall river wednesday night

W. D. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-18

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS.
CHIEF ELECTRICAL ENGINEER,

Rec 565
Ans Mon Dec 18 188 3

Address-reply-to 2166.60

Thos. A. Edison Constn. Dept
New York

Dear Sir

Please find herewith enclosed a list of material that will be wanted for Newburgh Station.

Referring to plan of this station — there is a door on the right hand opening into the engine room. If this door could be moved to the other partition that faces door of entry into this room, it would help us very much in the convenient disposition of, pressure regulators.

Kindly inform me if this alteration of plan can be effected —

Yours Truly
W. S. Andrews

Can not be moved
Campbell

1883-12-20

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Dec 20 188 3

Address reply to

[illegible] Construct. Dept
[illegible] New York

[illegible] you kindly request
[illegible] Dynamo Co to send me a
[illegible] of shipment when they
[illegible] — Have constantly
[illegible] made inquiry.
[illegible] difficulty in [illegible]
[illegible] my order is filled
[illegible] some month, & other
[illegible] other items are not [illegible]
[illegible] confer a great [illegible]
[illegible]

1883-12-21

Tiffin Ohio Dec 21th 1883

Mr. Samuel Enscll

Dear Sir

Leave here tomorrow for Bellefonte. Pa having after erecting lines here Painted all Poles two coats — Line has a nice appearance — Please forward if not already sent a blue print and guges of wire to be erected for mains for Bellefonte. Pa at once and oblidge. also ship wire along as in case i am not compelled to wait for material can soon get work completed there. The No 10 guage bare copper wire shipped to this point was reshiped back on the 18th inst to Thomas A. Edison

Avanue B 17th St newyork

as notified in letter

Respectfully yours

Irving Hibler

Mr. C. H. Campbell,

I send you herewith a list of the towns, some of which we made estimates for, and for each one of which the expense of canvassing, preparing maps &c. is to be born by the Light Co. We have a letter from the President of that Co. in which he asks for the following explanations, with which you must supply us at once, in order that we may submit ~~it~~ them to him.

Duplicates of all detailed estimates for plants for local companies. Blue prints of plans and towns, showing lights and conductors, also blue prints of central stations. This applies to accepted bids only.

In future duplicate estimates must be made out and furnished to the Light Co., also duplicate blue prints of any plans you get up in connection with any of our central stations.

A. O. Tate,

December 21st. 1887.

It is not necessary for you to have the list above referred to. You can simply give Mr. Tate the information we want.

OK — No plans or Prop. to Town Commission

CHC 12/27

1883-12-24

Form 1. 1-500-12-3-'83

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Address reply to New York Dec 24 1883

Mr. T. Edison Const. Dept
New York —

Dear Sir

Will you kindly buy
Blow-lamps like
you got for me

N/H

1884

Mr. Holliday, 756 Conant
and Leo 757 want one
each — Leonard wants his
right away to use in alley
Connection at Lawrence
Station

Very truly Yours
W. S. Andrews

Dell Dent
Spec Mechanic
N/H

1883-12-24

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

New York Dec 24 188 3

Address reply to

Mr. A. Kruesi Const. Dept
New York

Dear Sir

Please send immediately to Lawrence
under Mr. Blake
(748-12/26 ~~of 6 Copper wire Drawn .38"~~
~~of 6 Copper~~ Safe 749-12/26)

[illegible] for connecting up the
[illegible] there.

[illegible] of Copper wire
[illegible] Pearl Street, but the
[illegible] drawn and is unnecessarily large
[illegible] should have forwarded some of
this to Pearl Street (Lawrence) for about
[illegible] may have to use some
of this wire at Brooklyn however
[illegible] should at least 2 lbs of remain
at Pearl Street for a time

Very truly Yours
W. S. Andrews

1883-12-24

Form I. I.-500-12-3-'83

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Address reply to New York Dec 24 188 3

Geo A. Dawson Esq
New York

Dear Sir

Mr H. A. Cadogan, who, for some time past has had charge of the Edison plant on the Pilgrim, will probably have an interview with you shortly, with a view to entering Edison business in some capacity.

If you see this young man in Jersey City Station and have a few minutes conversation with him

Very truly yours
W S Andrews

1883-12-24
Form I. I.-500-12-3-'83

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Address reply to .....

..... Dec 24 188 3

Thos. A. Edison Constn Dept
New York —

Dear Sirs

The Ampere meters for
Bellefonte, Mt Carmel, Hazleton
Pequea and Middletown are
of the "A" type —

Very truly Yours
W. S. Andrews

1883-12-29

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Tiffin O. Dec 29 1883

Address reply to me at Mount Carmel Pa.

A. O. Tate Esq
New York

Dear Sir

Kindly inform me if you have a large stock of new style House Changing switches that you wish to work off

If you have not — I want to get up something more simple — and cheaper for use in Central Stations only

Very truly Yours
W. S. Andrews

1883-12-30

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Siffin Pa. Dec 30th 1883

Address reply to me at Mount Carmel Pa —

Thos. A. Edison Constr. Dept
c New York City

Dear Sir

Received your favor of the 26th inst referring to Mount Carmel and other Stations, and you may rest assured that lively movements will not lacking on my part, and I shall follow out the disposition of my men to the best possible advantage —

We are going ahead nicely here in Siffin and hope to have Station far enough advanced to light up by next Saturday. On Sunday there is a large Church to be opened, or dedicated, or something or other, and they depend entirely on our being able to light them up, having no gas —

I shall probably leave here on Wednesday, leaving things in Charge of Mr Conant — By the way, I would recommend that you give him a little encouragement by way of a rise in Salary I need not write anything in his favor for I believe you fully appreciate his merits

I am going to send a Mr John J Perry to Mount Carmel with a young man whom Mr Doubleday has recommended,

1883-12-3c

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

..... 188

Address reply to.....

and concerning whom I will write further in a future letter — By thus harnessing up new hands with those who have had some experience, we shall be able to gradually increase our force, as requirements unfold —

When I leave Mr Perry in charge of a Station, I would also suggest that you give him a little encouragement by way of an increase in pay, as I can recommend him as deserving of it —

Mr Conant & Mr Perry are now receiving $15.00 p week —

Do not address any more letters to me at Tiffin — My next place will be Mt Carmel, where I shall probably be on Thursday next, Jan 3/84 —

Very truly Yours
W. S. Andrews

1883 12-30

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS.
CHIEF ELECTRICAL ENGINEER,

Jeffersonville Dec 30th 1883.

Address reply to.....

Thos A. Edison Construction Dep't
New York

Dear Sir

According to promise I send you herewith three sheets, showing distribution of time for myself and assistants at Lawrence, Salt Lake and Jeffersonville at the end of current year.

Very truly Yours
W. S. Andrews

Enclosure

[ENCLOSURE]

1883-12-30

Form 1.1.-500-12-3-'83

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Address reply to 188

Distribution of Time
Lawrence Elec. Lt. Station

W. S. Andrews:—
Oct 10th to Nov 25th/83
Dec 5th to Dec 7th/83
Dec 21st to Dec 23d/83

H. M. Doubleday:—
Nov 17th to Nov 25th/83

John T. Perry:—
Nov 22nd to Nov 25th/83

Thos. P. Conant:—
Dec 5th to Dec 23rd/83

H. W. Leonard:—
Nov 24th to Dec 31st/83

[ENCLOSURE]

1883-12-30

Form I.T.-500-12-3-83

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Address reply to 188

Distribution of Time
Fall River Elec. Lt Station

W. S. Andrews:—
Nov 26th to Dec 4th/83
Dec 8th to Dec 20th/83

Wm. Dewobleday:—
Nov 26th to Dec 31st/83

John S. Perry:
Nov 26th to Dec 31st/83

A. S. Bevis:—
Dec 1st to Dec 22nd/83

Thos. Spencer:—
Dec 11th to Dec 31st/83

[ENCLOSURE]

1883-12-30

Form I. I.-500-12-3-'83

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER.

Address reply to 188

Distribution of Force
Goffin Elec. Light Station

W. S. Andrews :-
Dec 27th to Dec 31st/83

Thos. P. Conant :-
Dec 27th to Dec 31st/83

A. S. Lewis :-
Dec 27th to Dec 31st/83 —

1883-12-31

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Jeffris P. Dec 31 188 3

Address reply to

Thos. A. Edison Esq
New York

Dear Sir

I find in the V Dynamos both at Fall River and at Jeffris that there is considerable magnetism in yoke across top of magnet, and a consequent pole about eight inches below yoke. Does not this entail great loss of energy, and is it not probably due to imperfect fit between said yoke and the end faces of magnets?

Yours truly
W. S. Andrews

All the new single magnet Dynamos have consequent poles
It is due to bad
cast
E

1883-12-31 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, 12/31 1883

F. J. Sprague Esq
J. J. Bergmann & Co
292 Ave B.
City

Dr Sir

Have you notified Bergmann & Co. as to the size of flat head safety catches to be used on mains & feeders at Tiffin O.

Prompt attention to this will oblige

Yours &c.

T. A. Edison
Constr Dep't

I have not, as I have had no notice of anything of the kind.

F.J.S.

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

(1883)

NEW YORK, ... 188

Q. Answered this
This is what is to be done —

Lacey?

When the wiring's run is up, would it not be best to leave feeder switch finally closed, and ~~with~~ the omnibus wire dead grounded so that if a stock should arise after shutting down, everything would be in perfection —

F. J. Sprague

How about the break down switch

The main switch & field switch are all that are necessary in case of Breakdown

[TO C. H. CAMPBELL?]

FORM No. 1.

1883

THE WESTERN UNION TELEGRAPH COMPANY.

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS:

To guard against mistakes or delays, the sender of a message should order it REPEATED; that is, telegraphed back to the originating office for comparison. For this, one half the regular rate is charged in addition. It is agreed between the sender of the following message and this Company, that said Company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any UNREPEATED message, whether happening by negligence of its servants or otherwise, beyond the amount received for sending the same; nor for mistakes, or delays in the transmission or delivery, or for non-delivery, of any REPEATED message beyond fifty times the sum received for sending the same, unless specially insured, nor in any case for delays arising from unavoidable interruption in the working of its lines, or for errors in cipher or obscure messages. And this Company, is hereby made the agent of the sender, without liability, to forward any message over the lines of any other Company when necessary to reach its destination.

Correctness in the transmission of message to any point on the lines of this Company can be INSURED by contract in writing, stating agreed amount of risk, and payment of premium thereon at the following rates, in addition to the usual charge for repeated messages, viz: one per cent. for any distance not exceeding 1,000 miles, and two per cent. for any greater distance. No employee of the Company, is authorized to vary the foregoing.

No responsibility regarding messages attaches to this Company until the same are presented and accepted at one of its transmitting offices; and if a message is sent to such office by one of the Company's messengers, he acts for that purpose as the agent of the sender.

Messages will be delivered free within the established free delivery limits of the the terminal office—for delivery at a greater distance, a special charge will be made to cover the cost of such delivery.

The company will not be liable for damages in any case where the claim is not presented in writing, within sixty days after sending the message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

Receiver's No.	Time Filed.	Check.

Send the following message, subject to the above terms, which are hereby agreed to. 1888.

To

Campbell

Please get

an Exp. memo. of Cost

Cost of Ore plants

Closed to date—

Give No. lights Capacity

No. in District owned

& Cost Estimate

Soon as possible ✱ Yatt

READ THE NOTICE AND AGREEMENT AT THE TOP.

T. A. Edison Esq (1883)

Dear Sir

OKR

Of course you have patented the idea herein discussed — If it is worth anything — I regard it of great practical importance

Yours &c

W. S. Andrews

1883-(12)

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

..... 188 ,

Address reply to.....

[illegible]

[illegible]

[illegible] very much surprised & [illegible] you not from the Alum. [illegible] and I have [illegible] a summer [illegible]

[illegible] Yours Truly

[illegible]

Very truly Yours

W. S. Andrews

(1883-72-00)

Mr Insull

The "S" machine will need 10" pulley when running from 9½x12" Engine, or the A x S people will have to put a 5 inch pulley on Engine in order that it may not run above 280 sec per min.

C. A. Campbell

(EDISON)

Questions relating to running of engine and boilers

If with ordinary boiler with 100 lbs pressure how many inches high will water stand in the gauge glass it would without giving in water, about 2½ inches, when you [illegible] goes 1/2 inch higher

[illegible] to give them [illegible]

If crank pin get hot & you don't want to stop what would you do. Squirt water by a hose, lubricate with oil ~~[illegible]~~.

How would you apply water to the crank pin so you could attend to your other duties. Have a radiating hose pipe fixed.

What is [illegible] crank pin heating. Answer Up to tight — lack oil, [illegible]

If you were running your engine & she had been going 1 hr say half an hour & then suddenly commenced to thump if you had reason to believe you had dry steam what would you attribute the thumping to — answer — Cylinder oil fried & tapped worked rings bound —

What harm does it do to allow the crank pin connection to rattle or thump — Excessive wear & tear & ultimate breakage

(EDISON)

What causes a boiler to foam
Steam rushing towards steam pipe in too little steam space = [illegible]
Salt water
Good Getter to carry high or low water
Never always have the regulation depth
low water.

What is good firing & bad firing
of a boiler = Firing an even spread
fire regular in small quantities
Bad is carrying to the fire, throwing open door too much -
good [illegible] Slobbe Lettingat time.
How much water a coal will
burn in burning the fires of a 50
hp boiler for 10 hours -
one tenth of consumption well damped
[illegible] per top [illegible] down
20 [illegible] per 10 hours
Suppose you wanted to start an
Engine & she turned over
hard if you had to do it yourself
How would you do it.
Answer Warm cylinder open cocks then shut off
nearly all steam & try & turn it over
if it did not start let it little more
steam - then try turn over - never
open so wide that when you turn over
she will start off with great
rapidity - [illegible] when
off-cock open quick then shut
off then open slow [illegible] -

(EDISON)

3

What causes a boiler tube to burn out

+ Bad metal or becoming red hot. ~~dry~~
low - incrustation, sulphur in coal -

What do you think of the Gouf method of feeding water to a boiler by a pump, above or the other body - + ~~Both first-class,~~ ~~requiring anything approaching less attention~~ pump -

What is the disadvantage of sooty water tubes, how much power is lost by very sooty tubes, how are they cleaned how often should they be cleaned. Loss about 3/8 heat - cleaned, steam jet simplest method. every watch.

Suppose you had regular boiler pressure, a thin fire in the Engine was doing very little, when suddenly a large load came on what would you do in connection with preparing the boiler to supply the steam

Fire up. 3 mins after fire is lit working low -

How often would you blow off the boiler, running say up to capacity of boiler for 3 hours & 1/2 capacity for 7 hours, blow water once month / would flush ~~twice~~ a night.

Full capacity every 2 hours
Half " every 3 "

(EDISON)

What causes grate bars
burn out —

1st Clinkers forming on bars by
not keeping fire, spreaded + sulphur
in Coal, carrying to heavy
fire, [illegible]

(EDISON)

Engineer

(1)

What is Babbitt metal & give the properties.

Suppose the bearings of an 8½ X 10 Engine arriving from should get so hot as to melt the Babbitt, How would you proceed to get a new bearing ready ~~for the~~ in few hours

Can you put a new fire tube in a Babcock boiler & how would you do it quickly if you had it on hand —

Supposing you ~~were~~ had been running an Arrington Engine for say 2 months and knew that a very small amount of water ~~was~~ in the cylinder would knock of the Cylinder head and ~~you~~ this accident occurred to you what would you attribute the accident to —

after running Engines a month & had everything worn down to bearing surface How you would ascertain the minimum amount of oil you could safely use.

What is the principle of the automatic oilers,

Explain How the automatic oilers work —

How long before lighting is necessary would you advise the starting up of the Engine.

(EDISON)

Engineer 2

Suppose you ran short of Cylinder oil and bearing oil — what oil would you use for the Cylinder + bearings. —

Make a diagram and Explain the Armington & Sims governor —

How do you tell that a belt is slipping

Suppose you had a 6 inch single belt Conveying 10 horse power & running 2000 feet per minute ~~what speed be~~ how would you convey the same horse power with the same strain on the belt when it was only 3 inches wide + a single belt —

Explain the method of regenerating oil which has once been used,

How often would you ~~take~~ Examine main bearings steam chest & Cylinder also crank pin bearings

(EDISON)

(3) Engineer -

What is the Cause of hammering in some of the ~~Hand~~ Throttle Valves ~~in Engine~~ used for giving & shutting off steam in Engines & how would you stop.

With a given Load how would you prevent the governor from ~~[illegible]~~ Contracting the Engine,

I'

Questions

1st How do you commence to raise steam

2nd Start an engine

3rd Having warmed up cylinder would you start full speed

4th How would you account for knocking in the cylinder

5th What depth of water would you recommend above firebox in an ordinary boiler

6th How do you know when water is too low in a Babcock & Wilcox boiler

7th If your feed pump & injectors & all their connections are in perfect working order & no water going into boiler what would you do.

8th Suppose your water dried up or pump gave out

9th Cylinder cover broke no opportunity to get new one & work must go on soon as possible what would you do describe by sketch

10th Crosshead pin broke & you had no spare what would you do to keep running

Answers.

1st Have boiler filled with water by pressure from the main or by hand pump or by filling thro' manhole or safety valves.

2nd See that all drip cocks are full open turn on steam gently to blow out condensation & to heat up cylinder & pipes.

3rd No. let her go easily at first & gradually increase speed.

4th Condensation or priming causing water to be carried about at each stroke of engine

5th From 2½ to 3" never less than 2½"

6th Look at Water Gauge

7th See if water & gauge held water or if main had burst.

8th draw fires, stop the feed, open damper doors, & cool down boiler

9th Depends on mans ingenuity

10th Ditto.

(EDISON)

If you should [illegible]

[illegible] – Scraped [illegible]

Suppose you didn't [illegible]

Suppose [illegible] shades up

[illegible]

[illegible] have taken a [illegible]

[illegible] looking [illegible]

Questions cont'd

11th If engine will not start what then presuming your valves are all correct

12th If your crank pin should get too hot so as to stop engine?

13th What is the inside of an ordinary pressure gauge like, make a sketch

14th How would you consume smoke

15th How what pct of your boiler would you take steam for an injector

16th If two steam pipes are to be connected together to discharge into a pump, and one of your decimine size of bore presuming first two are same size

17th If your cylinder got cracked, connecting rod twisted crank shaft cracked regulator broke up in fact if a general overhaul take place what would you do.

18th How would you screw up a unit if all your cylinders got broken

19 How many lbs steam pressure should be lost by a well made safety valve

(EDISON)

When water gets low for some reason or other what should you do
answer — you didn't know where it was
will pull the fires — then pump up —

Setting Valve in a mine,
what lead would you give Valve
answer — no lead at all —

If there was a lead which way
would you give the most lead
on the up or down stroke —
answer on up stroke & why
would you so as to counterbalance
the weight of the connecting
rod.

How would you change the air stroke
into —
Suppose the water stroke fail
[illegible]

How often should a safety
valve be [illegible]
once day

Answers Cont'd

11th See if main bearance bolts are not screwed hard up.

12th Base bolts a cool with water or ice slowly.

13th [illegible] each opinion [illegible]

14th Leave furnace door open for a few seconds then close half and slowly altogether taking about 3 minutes to close.

15th The highest steam part.

16th double the area.

17 Report to headquarters and wait for instructions.

18th Take hammer & chisel.

19th Not more at anytime than 2 lbs.

(EDISON)

Q

If a belt 6 inches wide running 2000 feet per minute carries 10 h.p. how much would it carry if ~~[illegible]~~ at 4000 feet per minute, what would be the difference in the strain on the belt =

What is the benefit of a feedwater heater. What gain in economy =
1st = increase boiler capacity. 2nd. economy. 3rd diminish incrustation,

How much efficiency in a 50 hp boiler (clean) is lost by $\frac{1}{16}$ of inch of incrustation within the tubes, in pct =

(EDISON)

When gauge glass breaks
what do you do —
shut cocks, —
what breaks them Cold water
[illegible]

[MEMORANDUM BY W. D. RICH]

1st. Water in a Boiler will rise by increased temperature increase of Bulk from temperature 39° to Boiling Point from unit to 1.04 and at 100 lbs. Steam pressure corresponding with 337° to 1.10 Bulk. While Steam is forming and passing through the Water into the Steam room the amount of Steam bubbles in passing to the surface increase the Water bulk, raise the Water level according to quantity Steam disengaged and therefore the rise of Water in guage is not dependent only from the rapidity of Steam generation, but also from the Boiler construction to free the Steam bubbles easier, difference in horizontal and vertical Boilers conspicuously.—

2. Cocks are provided to blow the Water through to clear to disconnect from Boiler and clean or change pipe.
3. Rear Water with at times by means of a hose attached to pipe to support boiling Water and change of temperature.
4. Bearings
5. Want of proper lubrication or tiring set of bearings.
6. Short bearings or keying of bearings want adjustment.
7. The looseness of parts will soon stretch lines or belts, permit the piston to strike cylinder head and at least damage the crankpin, to loose fit prevents due lubrication.—
8. Temperature in Water and to cause evaporation.—
9. Keep Water is safety in uncertainty of feed-supply. Low Water feeds the Steam bubbles easier and gives the larger Steam room in Boiler, essential to keep the Steam dry.
10. To keep a steady and even bed of fire uniformly bright.
11. Waste of heat during 10 hours banking will depend on the character of Boiler & Setting, severe to its standing gas Bldg.

12. A small amount of steam let into cylinder will help the Engineer in turning over a hard turning Engine.

13. Heavy incrustations preventing the water to take the heat quick enough from the metal of the tube — or low Water in Boiler preventing the Water to cover the tube.

14. Pump is considered the best, combining steadiness and continuation, while Injectors have a small range of variation in quantity of feed and at trials said to have proven less economy. The late Exhaust-Injector is worthy of consideration now and should prove a saving.

15. Soot on watertubes lying nearly horizontal will flame coming from below, while the soot naturally can only rest on top of flue would do little harm, as the heating takes place from the underside of tube. The best possible accumulation of soot should take place and with Steam Blower by hose connected with Boiler it can be quickly done. The quality of Fuel burnt and the force of Draft must determine in practice how often inspection and cleaning is required.

16. Forced draft with light but even and frequent firing will bring up the Steam most rapidly.

17. If the Boiler is clean in start and a good Heater is chosen of frequently it is claimed to keep the Boiler comparatively free. The perfection of Heater, quality of water and service of Boiler make the determination of time a matter of local practice, gained by inspection of Boilers from time to time, and once a week may be sufficient.

20. Babbit Metal according to Nystrom is composed of 25 parts Tin 2 Antimony and 0.5 Copper.

18. Feedwater Heaters utilise the Heat from the Exhaust Steam, imparting some to the feedwater while being forced through the Heater. The claims of the different Heater-Manufacturers vary and may generally furnish a temperature of Feedwater of about 180 to 190 degrees, while represented to bring the temperature to within a few degrees below boiling point. For the Baragwanath Heater several degrees above boilingpoint are claimed and testified to. All agree that most sediments are deposited in Heater at temperature near Boiling point and a saving of about 15 per cent (10 to 40%) in fuel, the ratio varying according to the difference of temperature.

19. For 1/16 inch thickness of incrustation is estimated to produce a loss of 13 % in fuel.

21. Cool the bearing by water, clean out the oil box and safe oil with machine as possible.

22. Lower the water in boiler below defective tube, cut the tube out and expand in it the new tube.

23. Neglect of leaving the pattock in sufficient length to have open until cylinder is sufficiently cooled so as to prevent excessive condensation in cylinder or neglect of leaving the stopcock open or closed water or well.

24. Secure the feeding of oil to bearings carefully, watching that no heating takes place, in which case the limit for minimum amount of oil has been passed over.

25 Water and oil cups are of very different principles
6 25 some depend on liquidity of lubricant by certain temperature, some by feeding in consequence of vibration produced on a spindle resting on shaft and vibrated only by shaft revolving, some closed tubes forcing the oil by centrifugal power which is in motion, some based on condensation of steam and weight of water column to press drops of oil.

27 Engines should be started up gradually and warmed up by it, first of all water, get all bearings under right condition of lubrication before putting it in for service, which may require 5 to 10 minutes

28 Sperm oil is the best lubricant, all fatty matters free of grit or impurities will lubricate, also clear heavy mineral oil, which can be passed in the cylinder. Waste oil or grease may be stearicated and strained.

29. Throughout Wilson's Governor is in principle one eccentric movable on another eccentric. —

The outside — eccentric operating the strap with rod connected to the steam valve. Arms or lever-arms fastened to the shaft are provided with taper pins for receiving weights which by centrifugal power overcome the tension of counterbalancing springs. The second strap also laterally connected by linkwork to the movable eccentrics varies the position of the 2 eccentrics relatively as the weights are thrown outwards from the shaft by centrifugal force or approach the shaft in retarding by slower speed of engine and thereby governing.

30. Belt slipping is noticed by calculation from speed indicators relative to pulleys, by slipped loads of belt [illegible] or reading, by [illegible] noise of belt slipping conspicuously and by heating of the pulley on which the belt slips. —

31. Belts are equal for conveying power if the product of Belt speed by width are the same. That is a 6 inch belt with 2000 ft. per min. can be replaced by a 3 inch belt w 2000 ft. per min. belt speed. —

32. Oil steamed, that is passing by means of pipes at the bottom of Oil-holder steam through the body of the oil, will separate the impurities from it, will be cleansed to save the wasted good oil. —

33. The time of examining inside of steam chest and cyl. also crank pin depends on circumstances, with good lubrication and attention at Ocean Steamers only for after each trips it is possible and done for safety sake

34. Foaming in the Hotwell and Cone pipe connection takes place when water can lodge and is moved about by passage of steam over it or at intervals, letting the water in momentarily creates of vacuum, or steam coming in contact with water (letting steam into percolator chamber and to condensing steam) is considered the cause of Water rushing from opposite sides to such vacuum and producing the recorded water hammer.

35. The Governors are arranged to act in a certain limit of revolutions. If a certain load has to be carried and the steam pressure too low to bring the engine up to speed, would prevent the Governor from regulating.

/.

1. German Silver is preferable for meter shunts because its percentage variation in resistance with a given rise of temperature is much less than that of any other metal or alloy wch cld be used for the purpose.

2.

The resistance of one foot-circular mil. of German Silver is 127.32 ohms. (Clark & Sabine) "from Jenkins" and its percentage variation in resistance for 1° C at 20° C is .044 (Jenkins)
" 1° F " 60° F " .0247.

3.

No. of Lights	6	12	25	50	100	
Rw. of Shunt	.04	.02	.01	.005	.0025	

4

The resistance of the 25 light meter shunt was made .01 ohm at 15.5°C arbitrarily.

The resistances of shunts are inversely as the no. of lights. We can thus determine res. of shunt for any meter.

5. (or 60°F.)

Call the resistance at 15.5°C R.

Percentage variation in resistance of German Silver per 1°F is .024%

Then $R + R \times .00024 \times 40 =$ Res. at 100F.

$\therefore$ Resistance at 100F $= 1.0096\,R$

Res. at -2°F will be the resistance at 40°F since the temperature in the meter cld not fall below this on acct of Thermal lamp

When temperature of outside air is $-2°F$,

$$\text{Resistance} = R(1-.00024\times 20) = .9952R.$$

6

(In working this problem, I assumed that when the temp. of outside air was $-2°F$, that of the shunt wld be $38°F$ and that of the bottle & spool wld be $32°F$)

At $62°F$ $\frac{\text{Shunt Res.}}{\text{Meter Res.}} = \frac{1+.00024\times 2}{976} = \frac{.102508}{100}$

at $100°F$ " $= \frac{1+.00024\times 38}{982} = \frac{.102720}{100}$

At $-2°F$ " $= \frac{1-.00024\times 24}{1000} = \frac{.099424}{100}$

~~At 62°F~~

At $-2°F$ Variation $= \frac{.102508-.099424}{.102508} = .0300 = 3.00\%$ minus error

At $100°F$ " $= \frac{-.102508+.102720}{.102508} = .00206 = .206\%$ positive error

7

German Silver. The res. of solution decreases.

8

The resistance varies inversely as the temperature.

9

Res. of 25 light bottle = 1.73 Ohms

Res. varies inversely as no. of lights

No. of lights	6	12	25	50	100
Res. of bottle	6.92	3.46	1.73	.865	.432

10

To compensate for the variation in resistance of the $ZnSO_4$ solution with variation in temperature

11.

.215% per 1° F. .388% per 1° C

12.

So that a constant factor may be used in different cases.

13.

The iron wld be deposited on the plates; local action wld result and the E.M.F. caused thereby wld cause an error in the record of the meter.

14.

Iron.

15.

For accurate records very pure $ZnSO_4$ is requisite. Proportion between error & amt. of Iron in sol. not known.

16

To make the deposit adhere & prevent of "mud" & short circuit. & polarization

17

In making a qualitative examination of a very small amt of this flocculent deposit, I proved the presence of Zn & the absence of SO_3. It is extremely probable that the only Zn salt that it cld be is either the Hydroxide or the Carbonate, & the chances are in favor of formation of Hydroxide rather than Carbonate under the conditions in practice. It is very possible under this view, that it dif-

fers from the Hydroxide ordinarily formed on the plates, in the acid of ~~H_2O of~~ H_2O present.

18.

Danger of short-circuiting. Also heating of shunt & spool & consequent variation in proportion of current thro' bottle.

19.

Error from oxidation becomes a more important factor & also polarization has more influence.

20.

In ordinary instances ascertain from customer the average number of lights in use & put in meter as near that

number as may be.

21.

Ordinarily when 50 lights are used, a 25 light meter will be best. Determine size of meter by the conditions of use of light.

22.

Shld get some idea of size of gas bill or oil bill. i.e. form some idea of the probable loss. It wild probably agree with one or the other bottle closely enough so that you cld ascertain which bottle was in Make out bill on this basis temporarily. Of course the above is in case connections are apparently perfect. Test meter & if shunt spool &c for both bottle are O.K. Make out bill on

larger deposit. If shunt or 9 spool is out of course make out bill from perfect one.

23.

If temperature was going down much below 32°F, I shld endeavor to have thermal lamps put in. At 32°F shld have error of about 3%.

If I cld not get thermal lamps shld make a correction from calculation, according to average temperature.

24.

The cause of the gas is not known definately. ~~Perhaps Oxygen due action of Zn on H_2O~~. Perhaps Hydrogen due to action of Zn on H_2O. Some think it due to H_2SO_4 free in sol. I do not.

25.

Both Plates

26.

Make resistance of ~~the~~ both higher by polarization & ~~co~~ keeping the sol. from contact with the plates.

27.

No necessity of correcting them as they occur ordinarily. Their influence is not Eno'.

In my opinion, no change in resistance Sometimes ppt. forms mentioned in Ques. 17.

29

The acidulation wch the question implies, I don't believe exists; for the following reasons.

The oxidation of the plate seems to be dependent upon time only & independent of the amt. of current. I have deposited as much as 4 gr. of Zn in 12 hrs & oxide to the extent of about 50 m.g. formed on the plate. (25 light bottle)

Now oxide of Zn is very readily soluble in acid especially when freshly formed. Also if H_2SO_4 is formed. ~~by current~~ the amt of it formed wld be directly proportional to the amt of Zn deposited.

If the amt of H_2SO_4 in practice were enough to affect the working of the meter it wld be very marked ~~it dim-~~

which is at first formed will all dissolve up with stirring in a few minutes. I made up a solution of H_2SO_4 15 c.c. H_2SO_4 to 100 cc H_2O and a solution of Am.HO so that 1 c.c. of AmHO just neutralized 1 c.c. H_2SO_4 standard sol.

Now I measured 25 c.c. into each of two beakers. In the 1st I dropped one drop of the H_2SO_4 sol.

I now dropped one drop of AmHO sol. into each of the two beakers, & stirred well. At the end of five minutes there was no sign of ppt. in the first beaker & the ppt. in the second was undiminished in bulk. There are about 25 drops of the sol.s to the c.c.

∴ amt of free H_2SO_4 in the solution was $\frac{.04 \times \frac{15}{115} \times 1.83}{25 \times 1.05} = .038\%$

I now took a solution of $ZnSO_4$ from which I had deposited 3-4 gr and the plates in which had been covered with bubbles of gas which was always considered

der such favorable circumstances as the above quoted. Now I look upon the formation of oxide of Zn in this solution as indicative of the probability of the absence of any free H_2SO_4. Furthermore, if free H_2SO_4 formed the amt of oxide on a plate for given time wd vary beyond ~~any~~ the limits met in practice.

But the above is all hypothetical. To make positive tests, I took two independent methods of work. First Determination of free acid before and after passage of current.

Second Determination of Zn in solution before and after passage of current.

1st. If free H_2SO_4 exist in a sol. of $ZnSO_4$ and amt to be added to it, in less quantity than is sufficient to neutralize all the free acid, the ppt'd hydrate of Zn

as indicative of free H_2SO_4 & subjected it to the same test of 1 drop of $AuHO$ sol. No amt of stirring or lapse of time had the slightest noticeable effect upon the bulk of ppt. at first formed.

Therefore there must have been considerably less than .04% of free H_2SO_4 in the solution.

(1884-01-01)

2nd Method

I worked up the volumetric determination of Zn by $K_4 Fe Cy_6$ solution (Pot. Ferro. cyanide sol.) and found that I did readily check results to within .01%

I now made up a standard solution & placed a portion of it in a 25 light bottle & passed current from 1 gravity cell tho' it did not get a deposit of about 3 gr.

I made two determinations of % of Zn before current was passed they were

2.085% and 2.090%

I then made determination in the solution from wch the 3 gr had been deposited

I got 2.088% Zn.

I also weighed both plates both before and after & got difference between the loss & gain. Then I got oxidation of positive plate by washing with $AmHS$ & weighing again.

I found the difference between the gain & loss nearly exactly twice the oxidation of the positive plate.

That is the oxidation of the plates in this case will account for the difference between loss & gain perfectly well.

Now since in the above work it is evident that the percent of Zn did not vary nearly so much as .01% of the total solution it is evident that there must have been very much less than .01% free H_2SO_4 for the % of free H_2SO_4 will be greater than the corresponding Zn.

Hence I think that if any free H_2SO_4 be present in the solution, it is in too small quantities to be discovered or to affect the working of the meter in any way whatever.

30.

Clean the surface with dilute H_2SO_4 & dip in the Hg. Rub with nail brush if necessary.

31.

Cover mercury with dilute H_2SO_4 & dip plates in several times. Rub off superfluous Hg.

32.

It is not likely that any impurity in Commercial Mercury will ~~contain any~~ affect the working of the meter noticeably.

33.

Treat with strong hot HCl, decant & test HCl sol. for Pb, Zn Cu ~~Sn~~ &c.
Treat ~~Boil~~ Hg with hot H_2O & test for $PbCl_2$
Then treat the Hg with HNO_3. There shld be no residue.

34

No.

35.

Commercial H_2SO_4 is liable to contain ~~F~~ Pb, As, Fe, Cu, HNO_3 N_2O & H_2SO_3. Lead & As are the commonest impurities of consequence to us. Test by H_2S.

36.

Distilled water, if convenient. Otherwise as pure water as convenient.

37.

Most economical way ordinarily is to buy it by the carboy.

38.

Cheapest way of making distilled H_2O is to condense the exhaust steam in a room. Ordinary water when filtered is generally pure enough!

39.

For Fe & Pb by analysis.

40

No! not ordinarily

41.

No! not appreciably

42

In a carboy with siphon tap.

43

With NH_4HS for Cu Pb Fe Cd &c
Fe is commonest impurity.

44.

To prevent E.M.F. ~~by~~ between Cu rod & Zn plate.

45.

Probably no noticeable effect.

46.

By ask & dry them.

47.

Order of weighing makes no diff.

48.

Dependent upon size of meter.
~~For~~ 25 light meter, about ~~.7~~ ~~.7~~ .47%
too little

49.

Resistance of shunts & spools. Also thermal lamp & see that there was no connection between meter box & either pole. (Danger of short circuit in handling bottle)

50.

Yes! unless allowed for

51.

When bill is low for meter, also when bill is made out from multiple of deposit as in case of 200 light, 300 light, &c 52.

If I can get ~~ice~~ ice will make freezing mixture. Otherwise shd plot curve of temps & distances between platinum pts & estimate distance between points at existing temp. so that circuit will be made at a little above 40°.

53.

To within 5 milligrams

54.

Between 2 & 3 min.

55.

Usage. Especially rough usage

56.

With proper handling they ought to last indefinitely.

57.

With pincers

58.

Theoretically, yes! Practically, No!

59.

There is not so much liability of error in the small weights as in the large, for you become more familiar with the appearance of the small than the large ones.

~~F.~~ 60

Direction of current is determined by electrolysis of KI. Moist KI Det free paper is discolored brown by the I ^ by the Positive Pole.

~~F.~~ 61

Yes! but not much.

62.

It don't do it with present construction of meter bottle & plates. But if it were possible it wld make an unimportant variation in resistance of bottle by cutting off back of plate from conduction.

63

Polarization is a condition of the electrodes caused by the arrangement of the ions so that they make an E.M.F. contrary to that of the original current, thus increasing the resistance of sol.

65

Call EMF --- E
" Res. --- R
" No of Candles --- C
" Price of gas per 1000 ft --- P

Constant in dollars per gram of Zn deposited

$$= \frac{.5546 \times 16 \times 140}{104} = \$11.945$$ when gas is \$2.25 per 1000 ft & charge is made the same

1 gr Zn also $= \frac{\$P \times C \times R \times .24649}{E}$ when charges are equal for electric light & gas.

1 gr Zn also $= \frac{788.768 \times C \times R}{E}$ candle hours.

1 gr. Zn " = 2915.452 ampere seconds.
(with constant = 13. 1 ampere second = \$.00459)

66

If lamp is 16 candle power & charge is same as for gas at 2.25 per 1000 ft

The constant in dollars is

$$\frac{.5546 \times 16 \times 2.20}{110} = \$17.747$$

Constant in candle hours $= \frac{788.768 \times C \times R}{E}$.

Kohlrausch gives amt of Ag equal to ~~0.0113~~ 1 ampere second as .011363 gr of Ag.

On this basis 1 ampere second will deposit .000343 gr of Zn

$$1 \text{ candle hr} = \frac{225}{1000} \times \frac{5}{16} \text{ cents}$$

Let lamp give c candles when current is a amperes

Then $$1 \text{ candle hr} = \frac{a \text{ ampere hr}}{c \cdot 974}$$

$$= \frac{3600\,a}{974\,c} \text{ ampere sec.}$$

$$\therefore \frac{225}{1000} \times \frac{5}{16} \text{ cents} = \frac{3600\,a}{c} \times \frac{.000343}{974} \text{ gr. Zn}$$

$$\therefore 1 \text{ gr. Zn} = \frac{\cancel{225} \times 5 \times c \times 974}{\cancel{1000}\,4 \times 16 \times 3600 \times .000343 \times a} \text{ cents}$$

$$1 \text{ gr Zn} = \$.5546 \times \frac{\text{candles } R}{\cancel{\text{amperes}}\ E}$$

$$\text{or } 1 \text{ gr Zn} = \$.5546 \times \text{candles} \times \frac{R}{E}$$

67.

Yes. The bottles are the same size.

Correct reading : wrong reading :: $\frac{1}{974}$: $\frac{.04}{35.96}$

:: 102.6 : 112

∴ The reading should be about 10% high

68.

Try to put in right size plates. If mistake is made in putting in bottle take off 10% from bill.

69.

I shd use a 300 light meter. The heating effect in a 200 light meter wld be 8 times as much as in the 100 light meter in ordinary practice & so the amt of heat generated might be dangerous. On the other hand in a 400 light meter the error from oxidation wld be greater by 33% than in a 300 light meter. The former error (heating) wld be positive & the latter negative & so wld tend to neutralize each other.

70.

By the amt of Zn deposited each month in meter.

71.

It will make no difference about the character of the deposit, as the bill is made out from the loss of the positive plate & not the gain of the negative except in rare instances such as reversal of polarity.

72.

I shall send him in a bill somewhat below his average bill. Perhaps 20% lower.

73.

Call K. the constant for 108 volts
" K' " " " 102.06 volts.
(102.06 volts at lamp in 2nd case)
Shall have to assume that, other things being equal, candle power is proportional to amperes wch is this case is practically true.

73 (con.)

Then we have

$K : K' :: 104 : 102.06$

∴ M must decrease our constant per gram of zinc 2%

74.

I consider galvanometric tests perfectly reliable & they are very much cheaper quicker & easier. Pass current thro' resistance to be tested & a standard resistance in series. Connect terminals of each with a 4 point switch, so that current thro' gal. is taken as drop first from standard & then from unknown res.

If you have no galvanometer set the meters up in series.

(74) cn

& pass current from certain known number of lamps thro' them for notes time; having weighed all the + plates.

Weigh the plates again afterwards & test again all meters which vary more than 1% from the average of all near each other.

Fix if possible. If not return to Bergman & S.

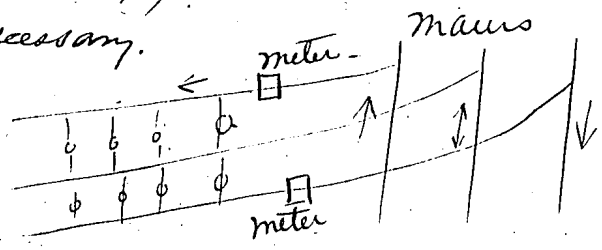
To make the current flow thro' the meter in the proper direction

76.

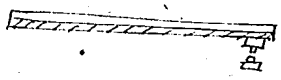
For throwing a house on the A to the B or vice versa, so as to equalize the A & B side circuits.

77.

Two meters are necessary.



78.

Two strips of brass & steel are rivet-ed together thus 

~~Upper strip is brass & lower is steel.~~
Upper strip is steel & lower brass.
When temp. fall, unequal contraction makes strip bend down until contact is made & lamp lights.

79.

Don't know of any difference from usual lamp of the circuit.

80.

Best to have it of high candle power so that it may not be liable to break, if current is a little too strong.

81.

.000343 X 60 = .02058 gr.

82.

$\frac{1070}{104} = 10.29$ ampères

2.9 % more

83.

$\frac{106}{104} \times \$10. = \$10.20$

84.

Increase! Diminish in resistance!

85.

It will burn out the ~~[illegible]~~ smallest safety catch plug between meter & main. & stop flow of current thro' meter.

86.

Coarse emery paper does it quickest & hence is best.

87.

The iron oxide will have no appreciable effect.

88.

Fe_3O_4 (Magnetic oxide)

89. Excitation.

There may be an error in the relative resistances of the shunt & bottle spool.

Extremes of temperature cause a slight error.

Mistakes in tagging & placing bottles may occur.

Mistake in weighing in case one bottle does not work well.

In figuring constants.

In " bill.

Rarely by short circuit between plates.

With ordinary good management, there shld be no important mistake.

From H. W. Leonard
C. E.

1 Written by W. S. Andrews.

Instructions relating to Dynamos &c –

Sparking at Brushes.

Causes: –

1st Brushes not set at neutral or non-sparking point
2nd One or more of the commutator bars raised up
3rd Roughness of commutator
4th Bad end on brushes, causing only a part of brush to bear on commutator
5th Grooved commutator – worn by bad brushes, causing a continuous spark from one part of brush
6th Brushes not opposite each other
7th Brushes pressing too lightly on com.tor
8th Brush holders stick on brass studs
9th Little ring of fire running round commutator –

To fix the :—

1st Move the arm carrying the brushes back or forward, until the point is reached where there is no sparking This will be the neutral point with the load then connected. —

2nd Carefully file down the bar or bars so as to leave no flat place anywhere on circumference of commr. The high bars may be easily found by ~~by~~ noticing that one edge of bar is roughened by the sparking more than the others; also the high bars may be seen and felt. A single high bar in a commutator will knock and vibrate the brush making a spark, and owing to the high speed of revolution, the sparking will appear as if on all the bars —

3rd. Smooth the commutator with fine sand-paper, and polish with worn sand-paper. Do not use Emery Cloth or paper, as the small grain of emery will bed themselves in the Commutator & brushes and cause Excessive wear — If the Commutator should be very rough, it may be necessary to smooth it down with a fine file, using a little oil; but Care and judgement must be used to take off only what is absolutely required to produce an even and smooth surface. After filing, always finish with fine sand paper as above directed —

4th. If there has been any sparking at brushes, they should be taken off and dressed up with a moderately fine cut file, using care not to alter the right angle —

By setting the brushes properly, and keeping them always at the neutral point, there will be no sparking and the commutator will polish nicely, so that the brushes will run for weeks with little attention, but sparking roughens and cuts up the commutator and burns the ends of brushes, hence if it is allowed to continue, both will require constant attention. The neutral or non-sparking point varies with the load of lamps. With a very light load, the brushes must be turned away down on sides of commutator, and as the load is increased, they must be shifted up in the direction of rotation until with a full load, the non-sparking point will be found to be away up near the top and bottom of commutator. It will be

observed that in running a Dynamo from left to right (standing with face to switchboard) ~~with~~ the neutral or non-sparking point will be somewhat behind the position it would occupy, were the Dynamo running from right to left. This is due to the winding of the armature

5th " Every two or three days set the brush-holders along the brass slide that carries them, and thus change the position of the ends of brushes resting on commutator. By thus shifting, the formation of grooves will be avoided, but by letting them run too long in one position, a rut will be worn, which must be particularly be guarded against as it inevitably must result in great waste of copper — The commutator should be worn evenly over

its entire surface by the factor of the brushes.

6th It is essential that there be the same number of commutator blocks between each brush. For instance if there were 40 blocks and the end of each brush covers two blocks, the brushes must be so set that 18 blocks can be counted on each side of commutator between the two brushes. If this is not attended to one brush will be nearer to the other, one way than it is the other, and it will be difficult to get them both at the non-sparking point, for when one brush is right on it the other will be off

7th The pressure of brushes against the Commutator should be as light as will permit the current to be taken off without sparking.— Any excess of pressure will only help to wear out the brushes and Commutator. Sometimes a high Commutator bar will knock a brush having a light pressure so badly that until the bar can be fixed, a heavy pressure for the time being will be necessary

8th When a brush holder gets hot, Expansion will sometimes cause it to stick and work tight on the brass stud; at other times the same effect will be produced by the gumming up of oil and dirt which has accidentally worked in. When brush-holders stick this way they are liable to leave the Commutator

making no contact with it, and yet be so close to it that they appear to touch, and to be work. well. When one brush is in this position, if the other brush on the same side is lifted off commutator, the main circuit will be broken, and an ugly spark will be the result. Always examine the brush-holders before starting to see that they work freely on the stud.

9th This is generally caused by small pieces of copper, or copper dust between the bars of commutator making a local short circuit from bar to bar over the mica. Clean commutator nicely with 00 sand paper and oil, used on a wooden block or board some three inches wide, and look carefully

over the mica insulation, and if any small particles of copper are observed in the mica, connecting or nearly connecting two bars together carefully remove the same with the point of a sharp pen-knife using great care not to cut away the mica.

After a station is loaded up with nearly all the lamps that it was intended originally to supply the speed of the dynamo may be insufficient to produce the requisite pressure to the current to bring up the lamps to the normal candle power. When this occurs, and it is found that the engine is going at its regular speed, and the regulator is so turned as to obtain the greatest pressure, the speed of the engine may be increased just sufficient to bring up the pressure. The pressure increases with the speed of the dynamo, but the amount of current depends on the number of lamps burning.

Lamps.

The test lamps are defective lamps of which there is a percentage made at the Lamp Factory — They are suitable for testing purposes but they should not be run to as high a candle power as regular lamps so that they may be made to last as long as possible — They cost 25¢ each, the regular 10 C.P. Lamps cost 60¢, and the 16 C.P. Lamps cost 40¢ —

An account of lamps out, lamps in stock and broken lamps returned from Customers must be kept, so that during any period it may be ascertained how many lamps were received as broken at the Central station. People are liable to steal lamps hence the necessity of keeping a strict account —

Wires.

All service wires must be insulated and placed at a distance apart of at least two feet, so that during the most violent wind storm they cannot be blown together

With the three wire system, the perfection of working will be attained when the customers are so placed on the red and blue side that there is an equal number of lamps burning on each —

At starting, the consumers are so connected, that there is an equal number of lamps on each side, that is between the compensating and red (or positive), and between compensating and blue, (or negative) — As customers are connected the ampere meter will show the relative load on the two sides. Should there be any

difference or inequality shown, fresh customers must be added to the side carrying the lighter load. When there is the same number of lamps burning on both sides, the pointer of the Ampère meter will stand at zero.

Some of the heaviest customers should have three wire service wires to their premises, and be provided with a house-switch so that when the system is badly out of balance the customer can be quickly thrown over from one side to the other. Four or five such customers will be sufficient to effect a balance when badly out, if the town is small.

By. W. S. Andrews.

FRANK SPRAGUE. (1883)

THE EDISON ELECTRIC LIGHT CO.,
65 FIFTH AVENUE.

(1.)

New York, ... 188

Volts	Defl.	Volts	Defl.	Volts	Defl.	Volts	Defl.
123	77.2	70.5	46.9	99.3	64.9	81	52.9
117	72.9	69	46	103	67	79.3	51.8
112.5	70.7	67.7	45.1	106.2	69	77	50.5
109	68.1	67.5	45.5	~~114~~ 111	71.1	75.3	49.5
103.7	66.2	69	46.8	115.5	73.5	74	48.2
100	64	70.3	47.5	123.5	77.8	72.2	47.2
96.7	62.2	71.7	48.7	117.2	73	70.5	46.2
93.7	60.4	73.5	49.9	118.2	70.5	69	45.9
90.5	58.9	75.5	50.9	109.2	68.5	69	46.9
87.7	57.5	77.7	51.9	105.2	66.5	68	45.8
85	55.9	79.7	53.2	101.2	64.5	66.5	44.5
83.3	54.9	81.3	54.5	98	62.8	65.2	43.8
81.3	53.5	83.3	55.5	94.7	60.9	64	42.9
79.3	52.4	85.5	56.8	92	59.5	62.2	41.8
77.5	51.2	87.7	58.1	89	57.8	61.2	41
75.7	50.1	90.7	59.9	86.5	56.2	60.2	40.3
73.7	49	93.3	61.2	84.7	55.2		
72.2	47.9	96.3	63.1	82.5	53.9		

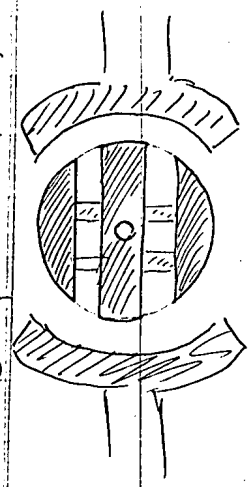
(1223)

THE EDISON ELECTRIC LIGHT CO.,
65 FIFTH AVENUE.

(2.)

New York, ... 188

Volts	Defl.	Volts	Defl.	Volts	Defl.	Volts	Defl.
60	40.3	39.2	26.9	10	4.9	66.2	45.9
59	39.8	38	25.7	8	3.5	68	45.5
58.2	38.9	36.5	24.5	6.2	1.9	74.5	49.8
57.3	38.5	35.2	23.5	9.5	5.2	81.3	54.3
56	37.2	34.3	22.5	10.7	6.2	90.7	59.9
54.3	36.1	33.2	21.9	16	10.5	104	67.1
53	35	32.7	22.6	20.2	15.1		
51.3	33.9	30.2	20.8	27.7	19.5		
50.5	33.5	28.7	19.5	38.2	27.2		
49	33.5	25.7	16.9	40.5	28.9		
47.7	32.7	23	15	42.3	30.1		
46.5	31.5	21	13.2	44.5	31.8		
45.3	30.9	19.3	11.9	45.2	32.2		
44.3	30	18	10.9	47	34		
43.2	29.1	17	10	49.8	34.2		
42	28.1	15	8.8	53	36.8		
40.7	27	14.2	8	56	38.9		
40	26.3	13.3	7.5	59.5	41.2		



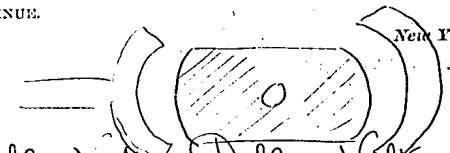
Zero each one out.

(283)

Circle cut down 1/8 diam

THE EDISON ELECTRIC LIGHT CO.,
65 FIFTH AVENUE.

New York, ... 188



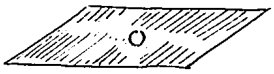
Volts	Defl.	Volts	Defl.	Volts	Defl.	Volts	Defl.
01	0	48.5	26.0	82	46.8	92.3	52.5
1.7	.5	49.7	26.9	84	48	90	50.9
2.2	1	51.7	28	86	49.5	87	49
3.	1.1	54	29.5	89	49.2	84.2	47.2
4.2	2	56	30.8	91.2	53.1	82.2	46.1
6.2	3.1	58.5	32.5	94	55.1	80.3	44.9
8.2	4.5	61	34.2	97.2	56.9	79.2	43.9
11.8	6.5	66	37.2	101	60	77	42.5
15.2	8.2	67	36.9	105	62.1	75.2	41.1
21.7	11.9	67.3	37.9	108.7	64.5	73.7	40.1
27.7	15.2	68	37.2	113	67.5	72	39
32.2	17	70	38.3	121.5	72.1	70.5	37.9
39	21	71.2	39.1	115	67.1	69	37.1
39.5	20.9	73.7	40.9	111	64.8	67	36.5
41.2	21.8	74.5	41.9	106	61.8	67	37
42.5	22.5	76.3	43	102	59.1	63.2	34.2
44.2	24	78	44.1	98.5	56.8	60	32.8
47	25.2	79.7	45.1	95.7	54.9	56.7	29.8

54.5	28.1
52	27.1
50.7	26.2
48	25
45.5	22.8
43.5	21.5
41.5	20.5
40.5	20
39.2	19.5
28.7	13.1
23.2	9.8
17	6.1
14	4.8
10.5	2.5
8.5	2.1
6.	1
5.5	0.
2	-2

(1883)

THE EDISON ELECTRIC LIGHT CO.,
65 FIFTH AVENUE.

New York, ... 188



Volts	Defl.	Volts	Defl.	Volts	Defl.	Volts	Defl.
0	0	63	44.1	104.5	72.8	81	53.9
.8	.2	66.2	45.8	109	75.8	77.2	57.1
1.8	1.1	67.2	47	113.5	79.1	73.5	48.8
3.9	1.9	69	48.1	122.7	85.	70	45.9
4.9	3.5	70.5	49	115	78.1	67.2	45.2
6.7	5	72	50.2	111.2	74.5	64.8	43.2
10.2	7.5	74	51.8	107	71.5	58	38.1
13.7	10.1	75.5	52.9	103	68.9	54.3	35.5
20	14.8	77.5	54.2	99.2	65.9	49	32.5
25.7	18.9	79	55.3	17	11.5	38.8	24.1
37	26.8	81.5	56.8	26.2	18.1	28	16.5
40.7	29.5	83	58.1	37	25.9	22	12.5
46.2	33.8	85.7	59.9	97	65.9	16	7.9
47.5	31.8	88.2	61.5	94.5	63.9	12	5.5
51	34.9	91	63.3	91.7	61.8	8.7	3.1
55	37.9	94	65.5	89	59.9	6.7	1.8
63	44	97	67.5	87	58.5	4.5	.8
60	41.1	101	70.2	84.7	56.8	3.2	-.0

Volts	Defl.
2.2	—.1
1.5	—.1
0	—2°

Experiment 2

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

(1883)

NEW YORK.....188

Field circuit to cut in under machine switch, that is, return switch and brush - to maintain field with open switch.

Would suggest a smaller & more compact two-way switch for connecting main to spare dynamo.

Field switch to be a two way switch. (small)

Want simple heavy switch same as for feeder, for break-down, to connect red and blue.

Best to have handle of feeder switch vertical when open. Switch so made now.

In act of shifting over to save the dynamos alternately, care to be taken to leave the main switch open when the field is both broken and closed.

T. A. Edison

[MEMORANDUM BY C. H. CAMPBELL?]

Sol.

Order for Greaving-Lines in addition to previous list

50 lbs Solder
1 lbs Soldering Salt.
2 Soldering Irons
Furnace
} Bergman

~~1 Micrometer Caliper to take in 1 inch~~

1 - Brown and Sharpe Micrometer Caliper to take in 1 inch. (Gro Place)

Campbell

For Engineering Dept.

1 - 4" Copying Brush, thick body

Campbell

Tools needed for Erecting (1883)
Pole line

Tillotson
1/2 Doz Steel digging Bars
1/2 " Long handle Shovels
1/4 " Spoons
1/2 " Pike Poles
1 Batting Pike
1/4 Doz Spurs
1/2 " pair Pliers
1/2 " Tons Large size with shaft
1 set Pulley blocks complete, small size
1/4 Doz hatchets 5 lb Each

~~Hunt~~ Patterson
1 - 12" Marking machine
1 - Hand saw

Tinkham
500 ft Running Rope
1 Crank Hoist

Dugmore
1/2 Doz Hall compound cutting pliers
1 Wire ~~Rope~~ - put up Pole

Carmichael

Material for Pole line

Hazleton Pa

150 Poles 41'-0" total length 6"x8" top

500 Cross Arms

427 { 750 Insulators
850 Pins
600 Lag screws 9/16 x 6"

424 { 30 Main Safety catches
9 Porcelain safety catches
50 lbs #14 or #16 copper wire

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Connecticut (D-83-044)

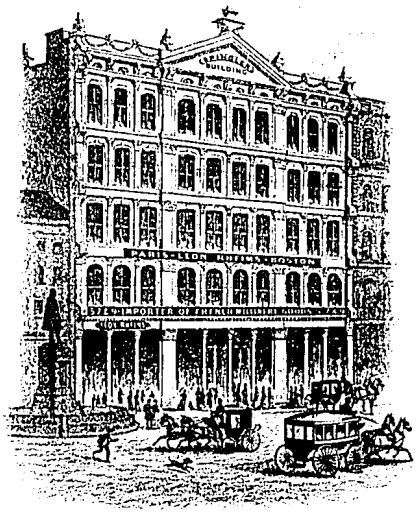
This folder contains correspondence and other documents relating to attempts to establish local companies and construct central stations in Connecticut. Included is information about the canvassing of Danbury, Hartford, Southington, and other towns. Much of the correspondence is by Charles B. Harris and M. P. Robinson of Hartford, who acted as agents for Edison company business through an agreement with the Edison Electric Light Company.

All the documents have been filmed.

43

May 10.83

Robinson



LÉON RHEIMS

IMPORTER OF

FRENCH MILLINERY GOODS

5. 7. 9. Union Square

NEW-YORK

BOSTON, 33 & 37, Temple Place

PARIS, 25, Faubg Poissonnière

May 10/83
Hotel Brunswick
Boston Mass

Mr Thos A. Edison
65 5th Ave
New York

My dear Sir

Very sorry not to have had the pleasure of seeing you Tues day last which day I spent in N.Y. I being in your office three times but had the pleasure of seeing Maj D.B. Eaton who signed our (Harris and Robinson) contract which I have and have commenced the Ball in New Britain and Bristol

Will you

1883-04-20.

Copy Contract agency

Sent to

W P Robinson
Massasoit House
Springfield
Mass

Apl 20/83

Kindly forward me care Massasoit House Springfield Mass tomorrow Friday or Saturday receive Saturday all papers &c relative to our business and confer a favor upon

with kind regards

Yours very truly
M. P. Robinson

Letter to Robinson
to

1883-05-22

Holyoke.

A GAS EXPLOSION AT THE CITY HALL.

An explosion of gas occurred in the assessors' room at the city hall yesterday forenoon at 11 o'clock, resulting in the severe injury of Arthur M. June, a gas-fitter employed by H. C. Carrington & Co, and destroying about $200 worth of property. The concert by the children in the main hall at night called for the lowering of the chandelier over the stage, and in order to do this a section of pipe was removed from the assessors' room, instead of putting a cap over the end of the pipe in the sister room, it was left open, and, when the gas was put on, it escaped through the half-inch opening into the room for 10 minutes before any one noticed it. As soon as Mr June was notified, he hastened down-stairs, put on the cap and was testing the pipe when the explosion came. He was thrown from the step-ladder on which he was standing, the skin was torn from his face and neck, and his moustache, eyebrows and hair were singed. His assistant, who was standing at the foot of the ladder, saved his face by throwing his arms over it, and City Messenger Hackett, who was standing near a window, narrowly escaped being burned. The heavy black-walnut door was torn from its hinges and demolished, and portions of the heavy wood-work were hurled across the corridor and through the glass window a quarter of an inch thick, in the door of the aldermen's room. The plastering was strewn in every direction and the wood-work around the doors and windows was torn off in a number of places. The occupants of the other offices in the building were pretty thoroughly frightened, and the noise of the explosion was heard on High street and as far away as Front street. The damage will be repaired at once.

1883-05-22

HATHES HOTEL

D. A. ROOD, Proprietor.

FILE No. .....

Hartford, Conn. May 22 1883

Nothing except Edison Light in Conn. Brewster is one our specials a gentle man & will send Brewster profits - City of Worcester is going to be lighted although the Electric people say they are not ready

Mr. A. E. Edison

Dear Sir " Some time since the subject of the light on the Steamer City of Worcester was mentioned, between us, and the cause explained by you. During our conversation here with different business men, we were asked if that was your light? and comments made on its not being very "brilliant", we were obliged to make what explanations we could. We merely call your attention to this, thinking you would, if possible, have the difficulty mentioned by you, overcome, for it is certainly to the

interest of all concerned and your reputation, that it should be done.

The gas people here are fighting the Arc Co. in City council, against poles, and the gas people say they do not object to underground wires. We think we are making many friends here. We are also working on N Britain, Bristol, Southington & Meriden. Somebody by the name of Brewster has been here. Who is he? Please send us some "Statements of Profit at Proctor"

Have you heard anything from Mr J D Murphy?

Yours &c

Harris & Robinson

Address this hotel

for H

Wrote May Eaton but get no reply —

U.S. Hotel 1883-05-25

Hartford May 25th 83

RECEIVED MAY 28 1883 ANSWERED

Prof T. A. Edison

Dr Sir " Yesterday we were at Southington Conn today and met with some encouragement for Isolated Plants, if not Central Station. There is a Water works Co formed there, about to commence operations, and we wish to know if the light could be operated 2/r from Central Station. This Water Works Co could and probably would furnish power. The town is situated something like Lawrence Mass. on one street some 2 Miles long and the water power Co is at one end of it. We are to have a meeting there next week. Meantime Mr Neal may call on you. He is the leading man there and we gave him a card to call and see you on his way to Phila. Was in Meriden yesterday, but the wealthiest and most prominent business men are in gas Co @ $3.00 for M ft. No gas in Southington, 4000 Pop'n not in Plantsville 1500 or 2 M pop'n. about 1 Mile from Southington. Also send more "Statements of Profits" Proctor" also small book "The Edison Light" Jaurs & Harris & Robinson &c

1883-05-28

RECEIVED
MAY 29 1883
ANSWERED
Yours
FILE No.

C. I. TREMAINE,
SCOVILL HOUSE
WATERBURY, CONN.

May 28th

Mr T A Edison

Dear Sir. We gave a Mr Skidmore a card, and his partner telegrafhed him to call on you to see the Light. Mr Turner is his partner and the live man of this place. Please have some one (if you have not time) take pains to satisfy Mr S in every respect. Things look well here. 2 gas Co's one oil. one coal. both very poor light. $4.00 pr ct. stock mostly owned in Phila. Send more statements of Profits. Proctor. to U S Hotel Hartford. Yours in hurry

Harris & Robinson
H

1883-05-29

UNITED STATES HOTEL

D. A. ROOD, Proprietor.

Hartford, Conn. May 29th 1883

RECEIVED
MAY 31 1883
ANSWERED

FILE NO.

Mr T A Edison Ogden

Dear Sir. We will have a June 1 1883
meeting here the first of next week, of prominent business men. Have you any particular form you wish them to sign asking for canvass & Estimate for Plant? if so send it to us. Also please send 300 doz of "The Edison Light" books. Many persons we approach wish to take them and look it over at home. Would like more "Statement of Profit" of Proctor, & the comparison of 19¢ per hour Edison against 84¢ per hour gas, based on the actual cost of Edison & the selling price of gas: the mille difference causes comment of almost misrepresentation. Yours,

Harris & Robinson

43.

May 29. 1883

Harris + Robinson

re – meeting to be held of prominent business men Hartford, Conn.

43

May 30th/83

C.B. Harris
Re-Introducing
Dr. Osborne

1883-05-30 Conn

Southington, May 30th

Prof T A Edison

Dr Sir " This will be handed you by Dr Osborne of this place. The Doctor has taken much interest in Electricity especially Electric Lighting and has done much to assist us here in interesting the citizens to introduce a Central plant. He visits New York partially to investigate your system and will call a meeting here and explain the details of your Light. Please give the Doctor all the time you can and put him in the way of seeing things at Bergmann's, Germ & Pearl St, and greatly oblige Yours

C B Harris

Re small fire in Bangor

PS You have any printed matter that would suit him please supply him.

EDISON,
Park Avenue.

New York, ... 188

OFFICE OF
GRIDLEY HOUSE,
SMITH & TOPSON,
New Building, Newly Furnished, First-Class in every Respect. Also a good Livery attached.

JUN 5 1883
ANSWD

Bristol, Conn June 1st 1883

Prof T A Edison

Dear Sir Was at New Britain Conn yesterday about 16 inhabs. 1 gas Co, fig 5m for 4th. Co owned by most prominent wealthy people on place. Will have hard fight there. but will make it. Came here on P.M. found live business men saw owner of knitting mill. of which there are 7. 1 clock factory. grist mills. manufg hardware &c. 7 banks. got 14 or 15 best men in town together last night, in a snug, complete little club room. 30 members. introduced scheme. they immediately started petition asking for estimate of plant. some of the stores here have as many as 60 kerosene lamps, 2 or 3 of 30 to 40 lamps. They made rough estimate and think they

Could start with from 4 to 5 hundred lamps and increase to 1000 or more as soon as they saw the light and were satisfied with its practicability for dwellings. Will finish petition today and forward you. Go to Bridgeport today & Meriden tomorrow, where we have appointments. Hope you have sent the 3 or 4 dozen books "The Edison Light" & estimates of plant of Shomokin, Proctor & Lawrence, also statement of Profits. Please post us as to any new cases or orders being made from time to time. We will have a meeting probably tuesday evening in Charter Oak Gas Co's offices Hartford, one some of the best men in the place. and as Hartford is the most important place in our territory and would influence many towns, we cannot afford to make a miss there. and as our opportunities for getting posted on the details of Light &c. we thought it would be well for you to send some one there to attend that meeting who is thoroughly posted. and can answer such questions as shall be asked. We advise you exactly time of meeting. We also expect to hold meeting of Waterbury early next week.

Do you wish us to write you these details so frequently. We thought you would want information about Gas Co's &c. At what price do you furnish lamps to local Co's? Do you wire up to a building and then charge consumer for wiring the house. About what percentage of breakage of lamps is there. We are often asked these questions and would like an early reply. Yours Norris & Robinson

Address Room 5 Trust Co Building Hartford

188

1883-06-01

No Canvassing
get letters when parties subscribe

RECEIVED
JUN 2 1883
ANSWERED

ATLANTIC HOTEL
PETER FOLAND,
PROPRIETOR

Brush Storage Battery system
not yet proved undeveloped
to failure

June 1st 1883

FILE No.

Bridgeport, Conn. June 1st 1883.

Books sent long ago

Prof T A Edison

Dear Sir We find that some persons representing your Co and made offers to put in plant on same terms given us except the royalty which they object to Mr D. W. Reed (an old friend of Mr Robinson) is leading man and has Co & Charter from Legislature to put up poles or wires underground He will call his associates together early next week and consider the question of Central Plant. Says you once gave him estimate. Don't know where it is now. Was a Canvas made of this place? if so please send us copy of same

The Fuller & Maxim people have made them liberal offers, but he says the Maxim is not giving entire satisfaction in New Haven and they feel backward about taking anything, especially as Brush has an Agent here trying to get a Co org claiming that they now have the storage system in complete working order. Can you inform us as to this. We want to be as well posted as possible, and not get our information from outsiders. Hope you have sent the Edison Light book to Hartford. We go there tonight. That will be our address ~~until~~

Yours &c

Harry D Robinson

Mr Patterson of the Organ Works here says they are satisfied with your light. Do you wish us to get letters from isolated plant people when we meet them?

1883-06-02

1883-06-02

Room 5 Trust Co Building
Hartford June 2nd 83

Prof T A Edison

Dear Sir. He met a Mr James Goodwin here today who is a friend of Mr Morgan, Mr Wright, Mr Fabbri &c and he says the last information he has had is that your light costs more than gas. He told him that your last improvements enabled you to compete with gas at $1.00 for the said as the said his brother are among the most influential people here and are known to be shareholders in your Co are looked to as authority in this matter and the forming of any Co here will much depend on his or their influence and the success of surrounding territory much depends on Hartford. He suggested to Mr Goodwin to write you or Major Eaton or some of his friends on this matter of cost that the answer could be used at a meeting we propose holding next week and he thought he would prefer us to write. If you or Major Eaton will write Mr Goodwin or counsel him fully on this point it will clear up about the only obstacle we can now see towards effecting an organization here.

Yours &c
Harris Robinson

OVR

43.

June 2, 1893

[illegible] [illegible] [illegible]
w. Wright at Drexel
Margin. Look at
No. 18 Bulletin You
will see what I mean
very big forms day about
the Cost of our light
We send you 50. of
last Bulletin No. 18
but [illegible] full
list [illegible] 25 [illegible]
yet [illegible]

Hartford, Conn., June

RECEIVED
JUN 6 1883
ANSWERED

Prof T A Edison

Dear Sir

.....188..

FILE No.....

You are invited to attend a meeting to be held at the Charter Oak Life Insurance Building, Room B, at eight o'clock, Friday evening, June eighth, for the purpose of considering the merits of the Edison "Incandescent" Electric Light, for use in stores, dwellings, and public buildings in this City, as suggested by Messrs. Harris & Robinson.

Yours, &c.,

James J. Goodwin,
G. M. Bartholomew

Mr. Edison is expected to be present at the meeting.

1883-06-06

Hartford June 6th

Mr. T. A. Edison

37

Dear Sir

Bernstein of Boston has his light running in the Standard (newspaper) office here. Says he intended going to NY to see you, but hopes to see you here friday and explain something about his light — He don't know where this local got his information about our giving an exhibition further than we said we would probably have some lamps there. Hope you can come.

Yours &c

Nassau Robinson

[ENCLOSURE]

The Evening Post.

HARTFORD, WEDNESDAY, JUNE 6, 1883.

The Incandescent Light.

Invitations have been issued to a number of citizens to attend a meeting in the Charter Oak building Friday evening for consideration of the Edison incandescent light. Mr. P. S. Hastings the treasurer of the company will be present and Mr. Edison himself is expected. It is intended to have the apparatus on exhibition and to offer an opportunity for full inquiry as to the system, its cost and the mode of using it.

Hartford Daily Times.

HARTFORD, MONDAY, JUNE 4, 1883.

The Edison Light.

A circular letter has been sent to a good number of our citizens requesting that they meet at 8 o'clock Friday evening, June 8th, at room "E" Charter Oak Life Insurance Company's building, for the purpose of considering the merits of the Edison Incandescent Electric Light, for use in stores, dwellings, and public buildings. This circular is signed by G. M. Bartholomew and James J. Goodwin. The question to be considered is whether a company can be formed to establish a plant in this city and furnish the light. Messrs. Harris and Robinson, agents for the light, have taken room 5, Trust Block, where they will correspond and impart information. It is claimed that the Edison light can be furnished as cheaply as gas, and that the cost of changing the chandeliers from gas to electricity, will not average over $5 for each chandelier. It is claimed that the Edison light is steadier and healthier than gas, as the electric light does not absorb the dampness of the atmosphere, while gas light absorbs it to a considerable extent. Of this we are not well informed, except as the friends of the electric light state it. One plant in the centre of the city, would answer for all the more thickly settled parts, in every direction.

The Orphan Asylum.

The board of managers of the Hartford Orphan Asylum held their annual

1883-06-25

BROWER HOUSE.

W. W. LARRABEE & CO., PROPRIETORS.

Hartford, Conn., June 25th 1883

Saml. Snell Esq.

Dear sir,

I started from Fall River this morning and did not get here until after 8 tonight when I arrived in Providence the first train for Hartford did not go until half past two P. M. I took that train and got as far as Willimantic when we found the train that made connection with us had broken down and we had to wait two hours for them so I arrived here too late to do much to night but will make up for lost time to morrow I went to call on Messrs Harris & Robinson but they were closed will see them to morrow found out where I can get a

1883-06-25

BROWER HOUSE.

W. W. LARRABEE & CO., PROPRIETORS.

Hartford, Conn., 188

pocket map to go by which I will get to-morrow morning. I took a walk around this evening and find Hartford quite a place most of the stores were closed this evening. I find a large number of the stores have Arc lights, I cannot give you any idea at present how long it will take me to canvass Hartford under the new system, it is full of business in fact it is I should judge by what I observed this evening larger than any city I have canvassed outside of Boston. It will take me somewhat longer being my first place but will rush it along as fast as possible, any information I can get hold of will inform you of immediately. I have a few questions I wish to ask you relative to canvassing,

1883-06-25

BROWER HOUSE.

W. W. LARRABEE & CO., PROPRIETORS.

Hartford, Conn., 188

where I find a store closed do I go back the next evening and take the number of lights? In fact do I get the information during the day from the Proprietor? Will I have tracing made of Hartford or will you get an Insurance map in New York also can you get Insurance maps of Pittsfield and North Adams? In most cities stores burn more light Saturday nights than any other evening how do I fix that when I do not stay in a place on that night and do I make a special canvass of the whole district on that night? Please inform me on these points immediately

Yours Respectfully
Geo F. Hilber

Brower House
Hartford Conn.

1883-06-27.

What does the wasted

Hartford June 27th 83

Samt. Snell Esq.

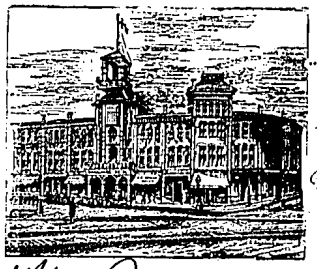
Dear sir,

I have sent you by mail this day a pocket map same as I use to go by when canvassing, in it you will also find considerable information which may be of some help to you. Messrs Harris & Robinson are away somewhere so I have got to do without their help. I have marked out the outside boundaries on map that I intend canvassing it is a large district as you will observe, but it ought to be canvassed, it embraces the business and also a large district of the best and medium class of dwellings which I believe Mr Edwin wants. Since writing you yesterday I find there is an Atlas of Hartford I should think Mr Harris or Mr Robinson might borrow one somewhere which would save you considerable expense, they not being here of course I cannot get one. as I believe they intend visiting New York it would be as well to speak to them about it if you have not already got an Insurance map. I made a big run last night and am fast getting into the idea of it I was out this morning doing the outside business and intended to put in a good afternoons work but as it is raining I do not know whether I can. I wrote you yesterday for some points which please send me as soon as possible. "it is as I said in my last letter solid business all the way through and going to be a fine district.

Yours Respectfully
Geo H. Wilber

1883-06-27

1883-06-28 — June 28 1883 838



OFFICE OF
Wilbackenap Hotel
Opposite the N. Y., N. H. & H. Railroad Depot.
J. A. NEWCOMB, Proprietor.

C. D. Harris
Wilbackenap Hotel
Hartford
South Norwalk, Conn.,
June 28th 1883

Mr Insell. Dear Sir. Your letter rec'd reached me here. I expect to be there saturday I will attend to the map you ask for. I sent Mr Hastings application for Estimate of Plant from Danbury yesterday for that place. Have got some of the best people there interested, if they don't get some cock & bull story about. Storage. law suits. sawyer-Mann. Daft or something else to upset it. things will go O.K. Am to have a meeting here tonight of the solid men of the place. Guess it will go all right. Know is Mr Edison. Think he had designs against me when he advised me to come last night instead of next. Have had

dealings with all kinds and classes of people but these "Yanks" take the cake, for a hard lot. Sometimes as hard to interest as western people. They have been such "skins" themselves that they expect everybody else is trying to skin them. Have you heard anything from Murphy?

I go to New Haven tomorrow but don't expect to do anything as I learn a political crowd there have a charter for Electric lighting from the Legislature & have adopted the Maxim & U.S. Arc. that Maxim is not giving satisfaction but they expect all lighting Co's to pay tribute to them for their Charter, and we (H+R) have no sugar to give away. Hope none of the letters I have given to different one, to see system in my has annoyed you all, but sometimes it is policy to do so that they can report to their fellows.

Yours &c

C D Harris

1883-06-29

Hartford June 29th 83

Saml Insull Esq.

Dear sir,

Yours letter of the 28th at hand and contents noted. I enclose copy of how I would like to have some canvass books made and printed I also omitted a column each for gas and also burners which should be on that burn all night of course this is only a copy, the remark column would have to be wider, it would be much better to have regular canvass books made it not only saves me time ruling books when I ought to be doing something else, but the whole canvass is right in books made especially for it and no dang from errors

1883-06-29

in copying, as you are liable to errors where you have to copy. it saves time and as time is money it ought to be an inducement. You speak of my going back to a place to make a Saturday night canvass, how can I when I ought to make the Saturday night canvass in the town I am in; I have not received information from you yet as regards Hotels do I omit them or get information from the Proprietor during the day "also in regard to Theatres" I am getting along first rate and making large sums every night will notify you when I expect to get through. "most of the stores here shut up at 6 except Saturday nights when they all keep open. What do I do when I strike a place as large as this where I cannot cover the whole territory in one Saturday

1883-06-29

night, and if I can cover said district in one Saturday night I cannot get over the ground but once and as I have to start very early I do not see how I can get an idea of how many he is burning through the entire evening or how late he keeps open I think Mr Insull you will yet have to come to it to go in and ask each man how late he keeps open and how many nights a week he closes it will take more time but it will give you the information you and Mr Edison are after. this and your present system of my counting lights from the outside would I think make it complete. hoping to receive an early answer I remain

Yours Respectfully
Geo H. Willis

(1883) - 06 - 29

Why has not Hastings replied to us —

Hartford June 29th

Mr Duell. Dear Sir: Mr Wilber says he has found a map here in one of the public offices, such as you need most. Its use will save you much expense. If I cannot borrow one I will buy one if possible. It is an Atlas and probably expensive. Give us whether you want to buy or only take tracing from it. Mr H— says you ordered him to go to Pittsfield from here. He got Mr Keating an application from Danbury for estimate, which should be furnished immediately and if you have no one to send there could not Mr Wilber go for 2 or 3 days after getting through here. We have now been delayed here through his nonarrival and if thing can be now pushed at Danbury we can comply with our contract, otherwise I feel like throwing up sponge rather than spend 2 months time & money on prospects of contract being extended. Please let us hear from you, or write Mr H— here about Danbury cases.

Yours &c

Nathan Robinson

1883-07-05

Hartford July 5th 83

Mr Insell P.G.

Dear Sir: I wrote you last week that there was maps of this place made to scale, and much information and asked whether you wished one to keep or only tracing. Mr Wilber says his instructions are to get tracing & he is trying to see city surveyor to get him to make one. The Mayor has 3 copies which he says cost $1½ each and he would accommodate us with one at that price. They are in sections (of city) in atlas form, made by G.M. Hopkins, 320 Walnut St Philadelphia, perhaps you can get one of him cheaper. But unless Dr Wilber hears from you immy, he will get a tracing (as per instruction) which will probably cost as much as the map. We were much disappointed that Wilber could not go to Danbury as we are now waiting for that.

Caurass, as they seem more
alive to get to work, than any
other place in our territory.
But suppose you have some
one else to send there to make
Caurass, it should not take more
that 1 or 2 days. A man can leave
on 6th Ave Elevated RR and be
in Danbury in 3 hours. it is
only few miles from Brewsters
station on the Northern or rather
New England RR. Hilber expect
to get through here this week.
I was only joking about Pitt &
having any ill will toward me.
He has no cause to that I know
of and hope it is the reverse

Yours &c
C B Norris

Mr — Personal
Care Mr Stockton

Mr C B Norris
Danbury Conn

1883-07-08

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
36	W	Mg	10 Paid nm

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, July 8 1888.

Dated Hartford Conn 8

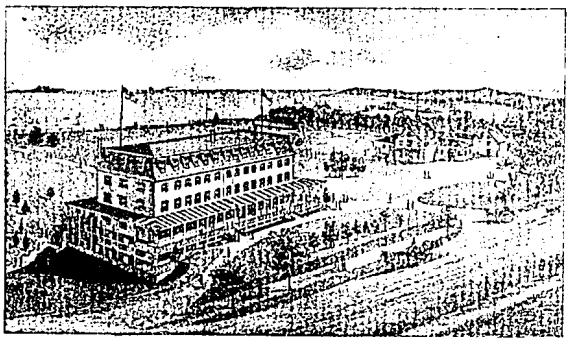
To Saml Insull

65 - 5th Ave NY

I have got through. Start for Springfield monday will write you

G W Wilber

1883-07-18



THE CLIFFORD.
PLYMOUTH, MASS. M. D. ROBINSON.

July 18

Mr Insull

Dear Sir. Mr Wilber will be in Danbury next monday, which will probably only take him 2 or 3 days. Can he then spend 1 day with us in Southington? which is on his route from Danbury to Worcester. The Southington people claim they should be among the first served, and we desire to please them, and we should do all possible while they are in the humor = Please let us hear from you address Hartford. Yours &

Harris & Robinson

1883-07-26

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
24	A		1885	Rush

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, July 26 1883.

Dated Danbury Conn 26

To Daniel Newell

Edison Electric Light Co

65 Fifth Ave New

Be through here tonight waiting

for money to go to Worthington

Geo W Wilber

Hartford, Conn. Sept 13th 1883

RECEIVED 1883 SEP 15 1883 ANSWERED FILE NO.

Mr T A Edison

Dear Sir "

On the Danbury Blue map sent in is

Gas jets shown x x x x	526
Kerosene lamps "	387
House Lights "	1997.

What is meant by House Lights?

We are surprised at the small number of gas & Kerosene given above. for we counted 600 gas and 300 Kerosene lights burning on Main st at 8½ PM June 14th. Please send us duplicate maps of Hartford, Danbury & Southington, also some of the first issue of Isolated Plant Book, with cuts of different size dynamos, also copies of estimates made for any places since the ones issued for Shoondoin & Brocton. Which we understand were not correct. Yours & Kanne & Robinson

Hartford, Conn. Sept 27th 1883

Mr Insell

Dear Sir We have been looking all day for the Hartford & Smithington Estimate you positively promised to ship us yesterday.

We learn that the Brush-Swan are trying to get a plant in Bridgeport Conn and have had a Committee of citizens appointed to attend an Exhibition of storage system at Willimantic Linen Mill Oct 3d.

We learn the Malleable Iron Works Bridgeport, Mr Atwater President wish some kind of Electric Light. perhaps your Mr Hutchings could do something with him. Let us have the estimates

Yours Kerr & Robinson

SEP 29 1883
ANSWERED
FILE NO.

Hartford Oct 5 1883 at 10-06

Mr Samuel Powell

Dear Sir

Have been looking at Journal of Sept 29th saying. Engineer sick we and estimates would be forwarded first of this week. Have not yet seen them.

We cannot make a move until we get estimates.

Understand Proctor Plant was started. Have you any newspaper report of it. If so send some will have papers here notice it. When do you expect to start Lawrence or other places.

Yours &c
Harris & Robinson

1883-10-20

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
Mr Coleman		17 Collect	458

Received at **852 BROADWAY.** Oct 20 1888.

Dated Hartford Conn

To Saml Insull

c/o Edison El Co

65 Fifth Ave

Half dozen disappointed and disgusted men here at nonarrival of Estimates you faithfully promised this morning

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Harris & Robinson

1883-10-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
374	GK	K	11 paid

Received at **852 BROADWAY.** Oct 22 1888.

Dated Hartford Conn 22

To T. A. Edison

65 - 5 Ave

No Calculators yet necessary

Is Han Southington total amount

Today answer

Harris & Robinson

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-23

THE WESTERN UNION TELEGRAPH COMPANY.

RECEIVED

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

ANSWERED

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
103	Ch	15	Collect

CHECK ..... 188... FILE No. 1044

Received at **852 BROADWAY.** Oct 23 1888.

Dated Hartford Conn 23

To T A Edison 65 fifth ave

Estimates you promised to mail
Yesterday, not here yet will
they start today answer.

Harris & Robinson

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-23

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
7	Cm	no	Collect

Received at **852 BROADWAY.** Oct 23 1888.

Dated Hartford Conn

To T. A. Edison

65 Fifth Ave.

Mail us today at Southington
Itimized daily running expenses
of that plant cost six dollars
No Exhibit received yet

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. Harris & Robinson

Form No. 1.

1883-11-03

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
157	Ag Ch	10 Pd	

Received at 852 BROADWAY.

Dated Hartford Conn Nov 3 1888.

To T A Edison

65 — 5 Ave

When will Danbury ~~Dan~~

Estimate arrive promised

two weeks ago answer

Harris & Robinson

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Hartford Aug 6 1883-Hax 6.

Mr D Israelle

Dr Sir

Mr Nasting writes you will come here some day this week to meet parties and discuss estimates, which we are pleased to hear, and will be here all this week so please advise us what day & train you will arrive and we will meet you. We are particularly glad to know Danbury estimate will be sent Thursday and for the Lords sake as well as yours & ours, dont let it fail for we build on Danbury going through first.

Yours &c

Norris & Robinson

Form No. 1.

1883-11-07

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
104	ma	vx	43 pd

Received at WEYBOSSET ST. PROV. R. I. 1207 Nov 7. 1888.

Dated New yorke

To Paul Insull. C Armington Dis

Deposited check ten thousand Harris
Robinson very anxious about Danbury
it is underground cant Krensie
go there. They say you
promised go Hartford & expect
you write suggest your going

Form No. 1.

1883-11-07

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
	104	2.	

Received at WEYBOSSET ST. PROV. R. I. Nov 7 1888.

Dated There I explaining about Danbury

To necessity of Krensie visit
before estimate ready

Tate

1883-11-08

Next fri Nov 8th

Mr S Insell

Sir" The parties who propose investing in Southington will have a meeting next Monday and we desire that you meet us there Monday 12th. You can leave NY 8 A M via NYNH RR. You may have to change cars at N Haven to reach Southington. Better bring some blank contracts also a lamp or r to explain system. also any other data you may have. Please telegraph here upon receipt of this if you can or cannot come if not fix some day when you can be there. These people have made arrangements to meet monday. Our address in Southington is care J B Savage

Yours &c Harris & Robinson

1883-11-09

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
409	Ky	Am	Dr Collect

Received at 852 BROADWAY.

Dated Hartford Conn Nov 9 1888.

To T. A. Edison

65 Fifth Ave

Meeting is called for monday as important investor leaves Tuesday you or your should meet us in Southington Monday noon answer

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. Harris & Robinson

1883-11-09

Hartford Aug 8th/11 83

Mr T A Edison

Sir Your telegram, asking the time of meeting at Southington be changed from monday until wednesday recd. The Meeting was called to accommodate a Mr Neal the wealthiest and enterprising man in that town, who must go to Cleveland tuesday to be absent some time, therefore we hope you or Mr Insell or some person authorized to arrange for the plant and close contract will be there to meet us on thurs monday, if it is impossible, suppose we must do next best thing to meet wednesday without Mr Neal who is our main dependence. The meeting here can be the same night of Southington meeting as S— is only 18 miles from here and we can get our parties together here in few hours. Danbury estimates recd. Please accept thanks for same. we would now like estimates for Waterbury & Smith — & Old Armory. The Goff Co here are bidding for the

city street lighting, with a good prospect of getting it. They have a 100 light plant running full and have raised money to put in another 100 plant. They have distributed stock "where it would do most good" and will undoubtedly get through Council all right, besides they claim to own some kind of charter from Legislature giving them rights for wires over and under ground.

Yours

Harris & Robinson

Let us know soon as possible about being at Southington Monday. Trains run direct via New Haven from Grand Central Depot. First train from N.Y. 8.40 AM. arrive Southington 11 AM

Please send us 1/2 doz Bulletins

Nov 19 1909

Nov 19/09

Harris & Robinson
re. change of meeting
Remarks to be held at Southington

Form No. 1.

1883-11-10

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
376	At	W	22 Collect

Received at **852 BROADWAY.** Nov 10 1883.

Dated Hartford Ct 10

To Samuel Insull Edison E.L.Co. Nyc

Southington meeting cannot be postponed from Monday be there or have some one else to deal for installment of plant answer

Harris & Robinson

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-11-12

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
156	Colem	W	Collect

Received at **852 BROADWAY.** Nov 12 1883.

Dated Hartford Conn

To T. A. Edison 65 Fifth Ave

Absolutely necessary some one to arrange estimate be at Southington tonights or project will fail leave York two or four thirty bring sample lamps answer

Southington

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Harris & Robinson

1883-11-14

TURNER HOUSE,

CORNER MAIN AND TURNER STREETS.

A. NEY, Manager.

Danbury, Conn., Nov 14th 1883

Mr Gale Dear Sir

Had good meeting here tonight, subscription started, and hope to have you come & close contract soon. We all the money will be subscribed this time, and you will see a fine ~~town~~ town compared with Southington. Will you be kind enough to send us here first mail estimated cost of running this plant of 1000 lights, left the other you made for 600 lamps at Southington. Please send this first mail. Rec'd 1-10 candle lamp, carbon broken, shaking around in globe, must have left my so. 1-16 candle lamp, carbon all crooked, unfit to show no use to us. have 2 other good ones send, samples should be best, also send the sample underground. Please have these sent here.

Yours &c
Harris & Robinson

5 8
Nov 14/13
Harris & Robinson

Northington!

Please note this about lamps and return at your convenience

A. A. Hale

Hope there will be a little more money in Danbury than there was in Southington

Thanks

OK

OFFICE OF
L. K. MANSFIELD,
REAL ESTATE
AND
INSURANCE AGENT,
Room 3, Library Building

Danbury Conn Nov 1883 11-19

Please answer here. Care Turner House

Danbury, Conn., Nov 19th 1883

Mr T A Edison

Dear Sir "At a meeting (of directors & stockholders) held here today the question as to furnishing lamps came up. will you please answer the following by return mail =

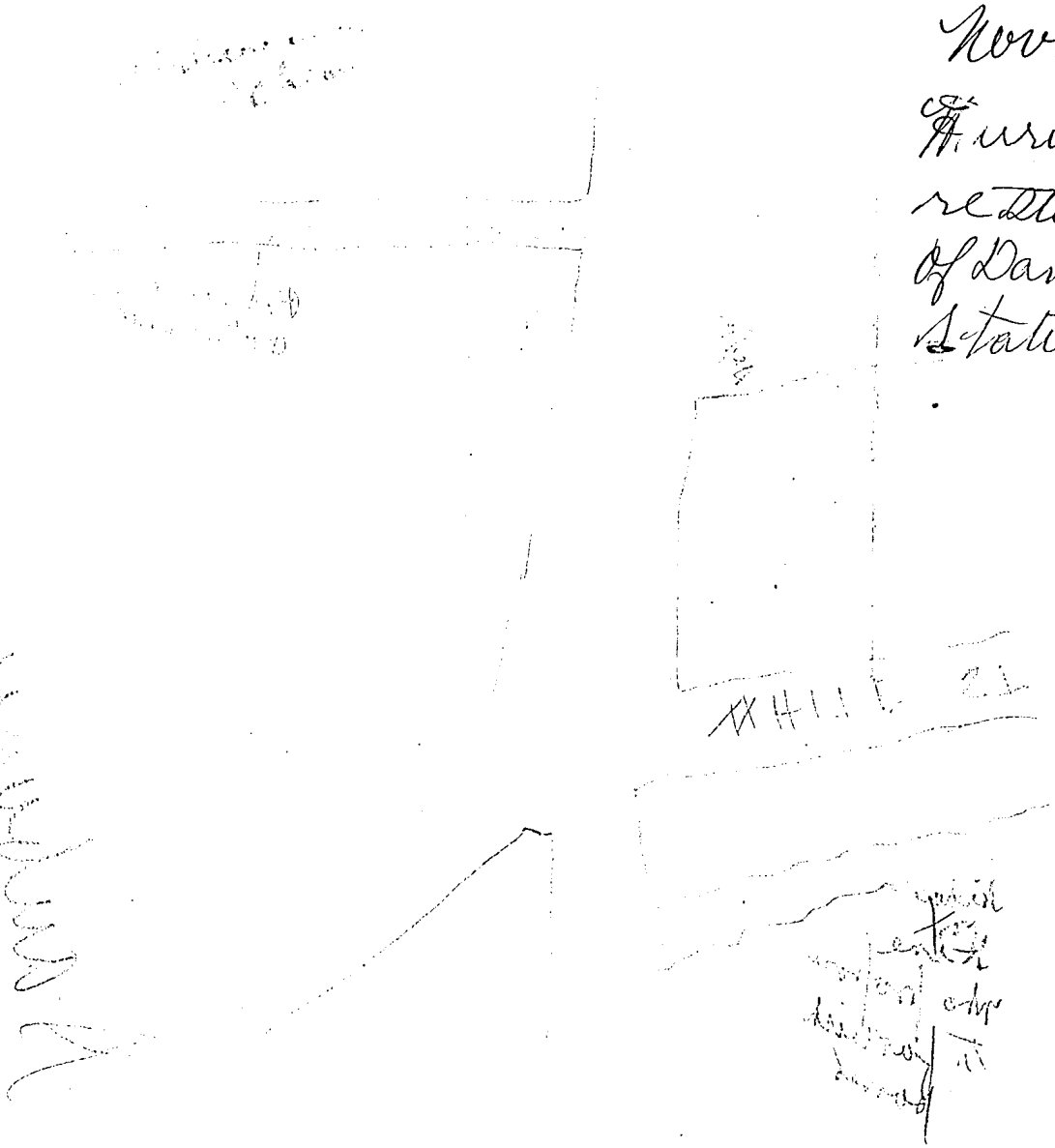
1st "Are there any lamps (for customers use) in the Danbury estimate. there is an item of (Bank 150 lamps) what are they for? or are customers expected to pay for lamps. when the first take the light? or is it usual for local companies to furnish these lamps. if so. what do they pay you for lamps. we understood from you last spring lamps to Central Station Co. would be 40¢ each. ~~we~~ we understand lamps are guaranteed for 600 hours, ~~[illegible]~~ ~~[illegible]~~ It is thought here. if customers must pay for lamps. as well as ~~[illegible]~~ wiring and connection. it would deter many from taking it the first year. How many lamps burning on Boston. do Danbury Co furnish? Yours &c Harris & Robinson

1883-11-23

68

Nov 28, 18

Harris & Robinson
re Starting
of Danbury
Station



1883-11-26

Danbury Nov 26th 83

Mr T A Edison

Dear Sir " Mr Jno B Nichols
Don't believe in this scheme

(firm of Nichols & Nine large hat Manufacturers of this place) was the first to subscribe and is the largest subscriber to the stock of Company we are forming here and is anxious to get light burning soon as possible. and says they have 3 boilers of 60 HP capacity with a Buckeye or Hartford engine of ~~[illegible]~~ nominal 80 HP horse power and proposes. that in case we fail to get enough stock subscribed to put in the whole plant, as per your estimate, to furnish power for the first year, at least. This engine is new and they only use about 35 or 40 HP during day. shut down at 5.30. There is engine exactly like this in Brooklyn running 170 HP every day. we can get all room wanted for dynamos in same place. Nichols & Nine are not for from place you placed Central Station on your Exhibit. If it not possible to do this. we can get building & steam from them for this winter Nichols says. get it started now if we only put in 500 or 600 light. and you correctly wish to do so. for then we will

have some place to send people from other towns to see it. It is unfortunate we did not have the estimate 1 month sooner, and have had things in good shape now, but it will certainly go through now, if you will give us all assistance you can.

Please let us hear from you immediately about this proposition of Nichols. Perhaps it would be well for some one to run up & look his engine & boilers over. It is less than 3 hours ride, fare $1.75, via NYNH & R.R. Ansonia or Northern RR from any of West side elevated stations & if we can get this to running this winter it will advance us one year in this section, for they will not be able to do anything before next summer, we can get street lighting about 100 lamps at $40.00 or $1 per year, if that is desirable.

Yours

Secy pro tem

Robinson

Turner House

We have meeting Tuesday eve 7.30

1883-11-28

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ~~November 28th,~~ 1883

Prefer to wait & make successful & well attended rather than risk failure which the plan would certainly lead to

Messrs. Harris & Robinson,

Hartford, Conn.

Dear Sirs:-

Referring to your favor of the 26th. inst., I do not at all believe in the scheme you propose. My experience is that if we depend upon other peoples boilers and engines, our lights are not satisfactory.

Very truly yours,

Thomas A. Edison Constn. Dept.

By Saml Insull

Mr T A Edison

Dear Sir, "We understood this was not a very desirable thing to do, but in case we failed to get enough stock subscribed to put the whole plant in as prestimate, and because ~~we~~ the whole matter of Central Plant Station in this section will be delayed for 6 months, and because this plant could have been in good shape now had we received the estimate one month sooner, (the canvass having been made in July) we ask, if as a last resort ~~to~~ getting this plant working, if may, whether you could and would put the plant in, using ~~power~~ steam from the described boilers for this winter. Please direct answer here to Yours Harris & Robinson Turner House Danbury

1883-08-29

TURNER HOUSE,

CORNER MAIN AND TURNER STREETS.

A. NEY, Manager.

Danbury, Conn., Aug 29th 1883

Mr T A Edison
Dear Sir

Some of our subscribers to stock have been told by a Machinist here that your price in estimate for 92 H P Boiler is exhorbitant. Will you please write us by return Mail why you adopt the B & W boilers & Lawrence engines, & their advantages. We have never had any information on these matters. Everything working OK & getting more subscriptions to stock every day.

Yours &c
Nannes & Robinson

Our business being peculiar we have to use machinery adapted to it. The Babcock & Wilcox boiler is a quick steamer our load at dusk comes on in space of 10 minutes. So the boiler must be quick we have tried every other kind of boiler. The Old ~~tubular~~ boiler is cheaper but no good for us. The ~~Atm~~ Lawrence Engine for many reasons which it would take too long to explain is the most suitable Engine for our purposes.

E.

The 99 & Atlantic Refiners
Mr. to Boiler and
Mr. Boston Office

59

1883 — —

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
574	Cor	16	417

Received at **852 BROADWAY.**

Dated Hartford Conn 1888.

To T A Edison 65 5 Ave

If Southington estimate is based on underground give estimate over ground for six hundred lights Answer

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. Harris & Robinson

No. 17—Form 2. **THE AMERICAN RAPID TELEGRAPH COMPANY.** (1883)

General Offices, 187 Broadway, N. Y.

This Company TRANSMITS and DELIVERS messages only on conditions, limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages.

This message is an UNREPEATED MESSAGE and is delivered by request of the sender, under the conditions named above.

FRED. H. MAY, Gen'l Man'r. I. A. SHERMAN, Gen'l Sup't. J. W. CONVERSE, President.

CHECK	NUMBER	TIME
	189 N-M	9.15

Dated Hartford 188

To T A Edison 65 5th Ave

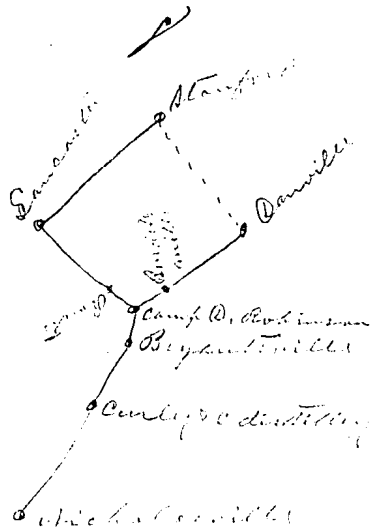
Bernstein lighted astonishes here Thousands will come tomorrow night people pleased we will come over to Menlo Park

Read the Notice at the Top.

Please pay no Charges on this Message, unless the amount is demanded of person by the Company's Agent.

(1858)

3


Stanford
Danville
Camp Q. Robinson
Bryant Hills
Cardigo distillery
Nicholasville

N

N

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Kentucky - Louisville (D-83-045)

This folder contains correspondence and other documents relating to the canvassing and aquisition of property for the construction of a central station in Louisville. Much of the correspondence is by W. Preston Hix, general agent for the Edison Electric Light Company and the Edison Company for Isolated Lighting, and by R. M. Hedden, canvasser.

All the documents have been filmed.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
282	Wn	H Collett	20

Received at 791 BROADWAY. July 12 1882

852 BROADWAY.

Dated Louisville Ky 12.

To Samuel Snaull.

65 Fifth Ave NY

Will finish Boy twentieth if possible Will write you tonight

R M Redden

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-07-28

We will look at his canvass

Louisville Ky July 28 1883

Samuel Sharpe Esq
Secretary
Dear Sir -

I regret exceedingly that I made such an error in my calculations as to the time it would take me to finish the canvas of this City - until after I had mailed my letter of the 16th I did not even conceive of its magnitude - I think you will agree with me when you receive my report, which I hope to send by Express on Monday if possible, that it has been no small undertaking - it will certainly much more than double the canvas of Utica, which Mr Davis in showed me, and, if I remember aright, you said occupied about 2 weeks to complete -

Commencing my duties in this large City without previous experience, I found, after I had proceeded over a portion of the business portion of the City, that I had made some omissions which made it necessary to re-canvass, in part,

some of it, which delayed me somewhat.

I feel that this explanation is due you, as I imagine, after my fixing a date for the completion of my work & which has been so largely exceeded, that you, as well as Mr Edison may have felt annoyed at not receiving my report ere this; and may have been inclined to censure me; but I hope when you do receive it, you will appreciate the work I have done — I certainly have not taken any time, but have worked day and night from the hour I commenced with the single exception of one evening devoted to pleasure.

I will telegraph you immediately after I have expressed my report and will be pleased to hear from you. By same means, the place you desire me to go to from here — the experience I have gained here will enable me to save time in any future cases I may be entrusted with —

I enclose statements of my expenses to date, made in the order as suggested by you, which I must wish be satisfactory —

May I ask that you make me a small remittance to provide against emergencies;

1883-07-28

at this writing, I have barely enough left to meet my expenses back to New York in case I should be re-called —

Very Respectfully

R. M. Sedam

1883-08-19

Louisville Ky August 19 1883

Jaud Fuller Esq

Jany

Dear Sir –

I enclose my bill for Service rendered in Louisville to date – amounting to $88.21 – No expense has been incurred aside from those I have previously reported –

My a/c with Mr Dawson, as I figure it, stands as follows –

To a/c rendered to July 31 –	194.28
" bill enclosed	88.21
	$282.49
By Cash advanced	200.00
Balance due	$82.49

Some days since I rec'd a note from your office notifying me of an error in my bill rendered to July 31 – I failed to see wherein I have erred – as I make it Salary for 31 days at rate of $15 per week is 4 3/7 weeks & equals $66.43 & not $60.00 as noted – am I correct?

I have been for the past two weeks entirely out of funds & was obliged to impose upon the kindness of Mr Hill for a loan to keep me out – I write hurriedly appreciate it if you will send me a telegraphic money order on the receipt of this & oblige

1883-08-19

and to the amount above stated, such sum as you may deem sufficient to defray travelling & other expenses, which I may be put to - also please telegraph me as to the disposition you may wish make of my future services -

Very Respectfully
C. M. Geddes

1882-08-29

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
69	Co	Rd	11 collect

Received at ~~791 BROADWAY~~ 852 BROADWAY. Aug 29 1882.

Dated, Louisville Ky 29

To Saml Insull

No 65 Fifth Ave Ny.

Did you get Report am

Waiting for orders and funds

R. M. Hedden

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
60			12 Collect

Received at **852 BROADWAY.** Aug 29 1882.

Dated Louisville Ky

To Saml Insull

65 5th ne

Not ~~hear~~ hearing from you

Causes me serious

Embarrasment what is reason

R M Hedden

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-01

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
144	AD.	Cm	12 Collect	42

Received at **852 BROADWAY.**

Dated Louisville Ky Sept 1 1888.

To T. A. Edison

65 5 ave

Am in pressing need of money Have you remitted please answer

R M Hedden

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-23

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
467	LK	11	Collect	83

Received at **852 BROADWAY.**

Oct 23d 1888.

Dated Louisville Ky 23

To T A Edison 65 5th ave

Maps mailed Monday at four o'clock should reach you Wednesday

W Preston Hix

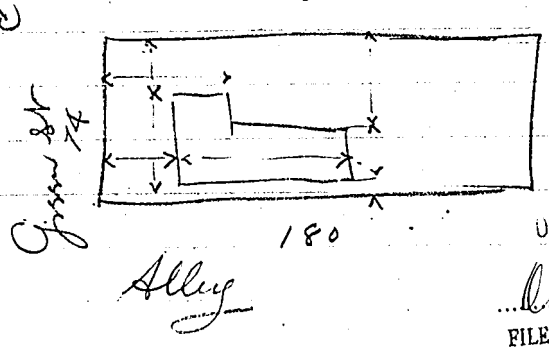
This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

[MEMORANDUM BY C. H. CAMPBELL]

Somerville Ky

Send in plan of lot corner of Green St and alley between 2nd and 3rd St with old brick dwelling - 74 x 180 - $1000 dollars with sketch of same showing portion of house



Write that

RECEIVED
OCT 31 1983
ANSWERED
Oct 31/83
FILE No.

[MEMORANDUM BY C. H. CAMPBELL]

73

Campbell
Louisville

Form No. 1.

1883-11-14

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
483	Ri	Dy	21 Coll

Received at 852 BROADWAY.

Nov 14 1883.

Dated Louisville Ky 14

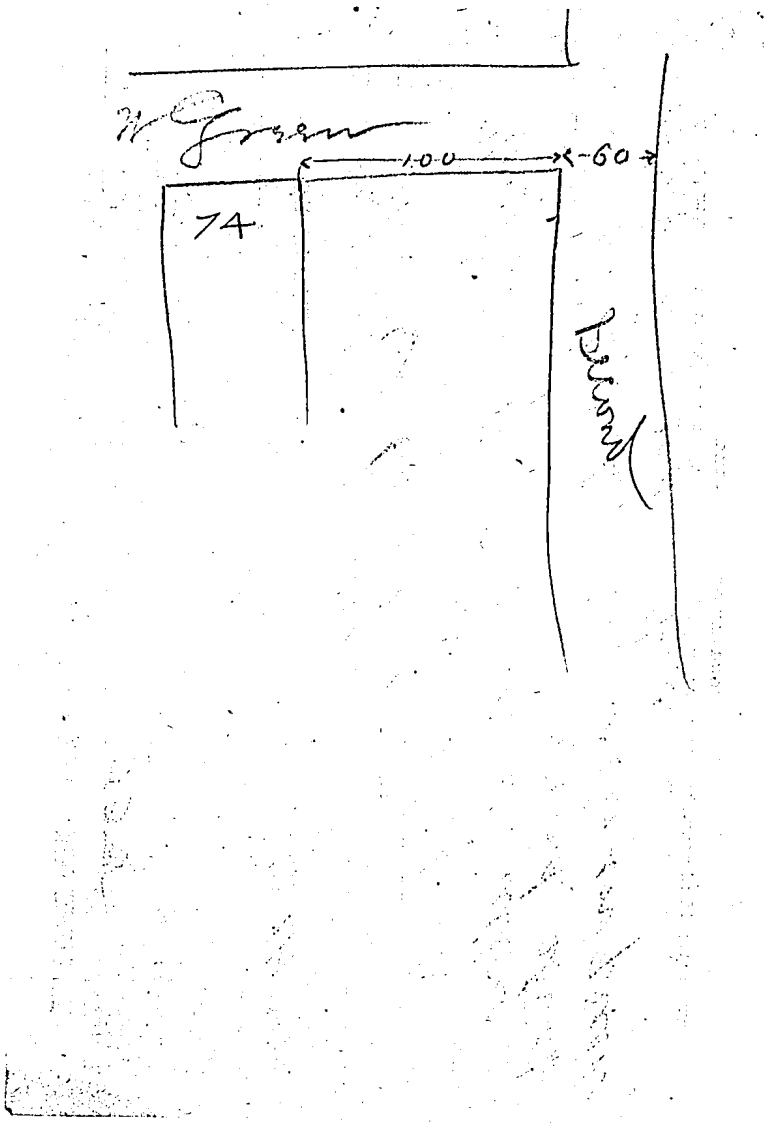
To Thos A Edison Esq

65 5 and

Neither water or sewer in alley sewer and water in second street one hundred feet east water in green street M Preston Jr

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.


W Green
100
60
74
Burn

1883-11-17.

The Edison Company for Isolated Lighting,

OF NEW YORK.

Office, No. 208 West Main Street.

W. PRESTON HIX,
Agent for Kentucky, West Virginia, and Virginia.

Louisville, Ky Nov 17th 1883

Thos A Edison Esq
No 65 Fifth Ave N.Y. City

Dear Sir:

You know we have a written option on that lot you are figuring on. It runs out in ten days. I understand other parties are wanting it. If you do not act before the ten days is out, you may lose it.

Yours Truly
W. Preston Hix

1883-11-24

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission, nor in any case where the claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

RECEIVED 1883 ANSWERED

NUMBER	SENT BY	REC'D BY		CHECK
349	C N	D	J L Collect	

FILE No.

Received at the WESTERN UNION BUILDING, 195 Broadway, New York 24 Nov

RECEIVED NOV 24 1883 ANSWERED

Dated Louisville Ky 23 Nov 24 188

To Thos A Edison Jr 65 5th Ave NY

FILE No.

Can get lot eighty four by two hundred & four fronting on Jefferson rear entrance by alley in square forty two on map for thirty one thousand dollars particulars by mail

W Preston Hix

1883-11-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
580	WR W	23 Collect		576

Received at 854 BROADWAY.

Dated Louisville Ky 24 Nov 24 188

To Thos A Edison 65 - 5 ave.

No nearly all the property in this vicinity is entailed designate the blocks here after by figures in the circles on blue print

W Preston Hix

This telegram has just been received at the office in 854 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
73	Co	Cm	39 Collect

Received at **852 BROADWAY.**

Dated Louisville Ky Nov 24 1888.

To Thos. A. Edison

65 - Fave

Best can be done on that lot lot on square forty fifty two by two hundred and four front on

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-24

Form No. 1.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
73			

Received at **852 BROADWAY.**

Dated Nov 24 1888.

To

Jefferson rear on alley for twenty five thousand this is all that can be don on these squares

M. Preston Hix

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-11-27

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not be held liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
465	M	M	Collect

Received at 852 BROADWAY

Dated Louisville Ky Nov 27 1888.

To Thos. A Edison
65 - 5 Ave

Shall I accept Green Street lot Closing the matter in Writing subject to perfect title option nearly out

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. W Preston Hix

[TO C. H. CAMPBELL]

1883-11-27

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

NEW YORK, Nov 27 1883

Wm Campbell:

We can't do anything better in Louisville than to take the lot for C.S. upon which our present determinations are based. Can you give me the estimate today. I believe you were to prepare it some days ago.

Yours

(1883-11-)

Major Eaton

Of course I know nothing as to what is being done in Louisville, but I would say, that I consider the Company bound to Messrs Jno E. Green Jno Mason Brown, & Chas R Long. And they should have an opportunity to act or decline before closing with others.

Respy
Jno H. Breckinridge

[TO C. H. CAMPBELL]

1883-12-15

Campbell please make
statements of running
expense & profit
for Louisville as
quickly as possible

Yours
Lee

R Rec'd 1.5/84

Mr Tate

(1883)

Please Write to

Louisville Ky

inquiring for distances between

Orchard + Weisiger avenue - 3

Weisiger + Lawrence - 3 or

Lawrence Ave + Magnolia St 3 4th j!

I am waiting for this information to finish chart

Mr Tate

58

H. Guimarães

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Massachusetts - Brockton (D-83-046)

This folder contains correspondence and other documents relating to the construction and operation of the Brockton central station, which opened on October 1, 1883 as Edison's first underground three-wire system. Much of the correspondence is by Edison employees Frank J. Sprague and H. Ward Leonard and by representatives of the Brockton company, including William L. Garrison, Jr., treasurer, and W. J. Jenks, station manager.

Approximately 80 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence regarding orders, shipments, employee expenses, and routine financial transactions.

1883-03-02

1321 Broadway. Feb 3/83

Mr Eclin

Please mail me the Estimate of Brooklyn Bridge left with you by me yesterday I did not intend to leave it

Yours truly
Wm Wolfe Construction

THE EDISON ELECTRIC LIGHT CO.
65 FIFTH AVENUE

27

New York, 14 March 1883

Clarke

D 1883
C. L. B.

Mr. S. Insull

Dear Sir –

Will you please get me passes to the Tube Works, Machine Works, & Lamp Factory for Mr. W. J. Jenks of Brockton Mass. He is here in the interest of the Brockton Co (when formed) Estimate for which is now being made. He is working up this matter for Mr. Spencer Borden, & it is important that he should have every facility to push himself.

Yours &c

Chas. L. Clarke

B.

1883-04-13

Brockton Mass,
April 13 1883.

Mr. Thomas A. Edison
New York.

Dear Sir — Mr. Chase writes me under date of Apr. 11 :— "Mr. Edison states that when the estimates are complete, he will come on with a competent party and thoroughly canvass the matter of planting poles."

It will doubtless be a matter of gratification to the members of the Brockton Company, as it certainly will be to me, to have you make a personal inspection of the ground we propose to cover. After the number and general direction of conductors is indicated however, I think it will hardly be necessary to employ any line engineer, unless you prefer to do so. It has been my business for several years to locate and secure rights of way for telephone lines, and I have a foreman here who is thoroughly up in the details of line construction.

Mr. Borden informs me that the wiring of buildings here will be done precisely as in New York. At the

1883-04-13.

same time he thought I had better write you for confirmation of his views, and to secure from you such instructions as will enable his men to work intelligently in wiring any new buildings which may be fitted during their construction, or any which may be covered by early contracts.

Yours Respectfully
W. J. Hunt
Manager.

After we get the Estimate ready shall we have him to come

188(3) -04-16

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
278	HJ	NV	9	244

Received at 791 BROADWAY. April 16 1882.

Dated Boston Mass 16

To Thos A Edison

65 Fifth Ave

Brockton directors meet tomorrow

Send latest information tonights Mail

W. S. Garrison

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-05-22

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. / Pierrepont Wise, P. O. Box 1633.

RECEIVED MAY 23 1883 ANSWERED

BOSTON, May 22, 1883.

FILE No.

Samuel Insull, Esq. Private Sec'y
New York.

Dear Sir:

Yours of the 19th is rec'd. I trust the re-determination of the Brockton conductors will not take long. How about plant of stations? Can we not push ahead in that meantime? Mr. Jenks is drawing $125. per month without giving value in return.

We are pressed to decide whether we can guarantee the light by Sept. 15th. If we can there are 3 new houses on High St. (26 lamps each) we can wire. Unless we say yes very soon they will be piped for gas. Will Mr. Edison endorse our guarantee? Distance from Main St. 650 ft. - from Pond St. 300 ft.

Truly yours, W. L. Garrison.

1883-05-23

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. / Pierrepont Wise, P. O. Box 1633.

RECEIVED MAY 24 1883 ANSWERED

BOSTON, May 23, 1883.

FILE No.

Saml Insull, Esq. Private Sec'y
New York

Dear Sir.

I enclose plans of 3 houses on High St. Brockton, & Bryant's Block, upon which I want estimates for wiring, at your early convenience. We ought to get the whole Block but people are getting skeptical about our furnishing light & Bryant is afraid to give us a chance on more than the first floor. - If the data enclosed is not sufficient, please address W. J. Jenks for more & give us an answer before these builders decide for gas. We ought to wire every new house in our circuit. Truly, W. L. Garrison.

1883-06-01

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. / Pierrepont Wise, P. O. Box 1633.

RECEIVED JUN 2 1883
ANSWERED
June 2 1883.
FILE No.

BOSTON, June 1, 1883.

Thomas A. Edison, Esq.
New York.

Dear Sir.

Your favor of yesterday is rec'd with final estimate for the Brockton Co. All right. We are ready to sign contract with you for the installation & go ahead at once. Will Mr. Howell come here & attend to the business? We ought to have our contract with the Parent Co. signed first. Please see that it is forwarded at once. We are anxious to see the dirt fly in Brockton.

Very truly,
W. L. Garrison.

Can't you use the "Deane Pump" in our station? Should like it if you can.

1883-06-04

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. / Pierrepont Wise, P. O. Box 1633.

RECEIVED JUN 5 1883
ANSWERED
188
FILE No.

BOSTON, June 4, 1883.

Thos. A. Edison, Esq.
New York. —

Dear Sir.

Your favor of the 2d inst. is rec'd with contents as stated. I return herewith contract executed & check for $4966 25/100, being twenty five per centum of estimated Plant for Brockton, which please acknowledge.

In case we cannot get permission to run our pole lines as proposed, it is understood that a corresponding allowance will be made by you. —

The directors of the Brockton Co. duly authorized its Treas^r to sign contract with you, at their meeting June 2d. — Respy W. L. Garrison, Treas^r.

1883-06-06

11

Edison Electric Illuminating Company,

OF BROCKTON.

Edison Electric

CHAS. G. WHITE, President.
W. L. GARRISON, Treasurer.
W. J. JENKS, Manager.

Brockton, Mass. June 6 1883

When will

T. A. Edison, Esq.

Dear Sir—

Please hasten if possible, the estimates on cost of wiring buildings of which plans (outlines) have been sent you. They are in process of erection and will be ready for the wiring within two weeks, and the owners are impatient to know the cost of the installation. We shall send other sketches of like character tomorrow. Dr. Borden, who has the three houses, will probably not be satisfied unless we give him a guarantee in writing that he can have current by Sept. 15, and that we also guarantee to pay the expense of piping his houses for gas in the event of any failure of the electric system within one year thereafter. Would you wire him on that basis? ~~No Sir~~

~~We are not so hard up for a month for our business~~

~~not guarantee anything.~~ Respectfully

Yours &c

W. J. Jenks

Manager.

1883-06-08.

Brockton Mass. June 8/83.

Mr. T. A. Edison
65 Fifth Ave.

Dear Sir — Notice that in your last blue print, describing the district now to be constructed, the streets running from Main Street to Pond street are marked for pole lines. I think it was understood by Mr. Sheringer, Beaufield, and Krenzi when they were here that it was not feasible to construct such lines on Pleasant, Crown, High Elm or Belmont streets. It might perhaps be possible to secure a right for one or two of them, but in the majority of cases the streets and sidewalks are too narrow, the trees are in the way, and the sentiment of the residents would fight it indefinitely. How can we run a line midway between two streets in each case? How large will they (the poles) be? How far apart should they be and within what limits may the distance be varied? Do you wish me to get prices on the few which will now be needed, and in any way take any steps? If we set in private land shall have to locate each pole by stake and get permits accordingly. Respectfully — W. J. Jenks, Manager.

39

1883-06-09.

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. / Pierrepont Wise, } P. O. Box 1633.

BOSTON, June 9, 1883.

Samuel Insull, Esq. Private Sec'y,
New York.

Dear Sir.

Absence from town accounts for my delay in acknowledging your favor of the 5th. Regarding the poles, we are doubtful of getting permission to place them in the streets designated. But we do think it probable that they can be placed on private lots in the rear of the houses we desire to reach.- I did not raise that question before signing contract because it might have occasioned further delay, too long protracted already. My letter intended to make it understood that if we fail to get poles on streets named, that the

1883-06-09.

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. / Pierrepont Wise, } P. O. Box 1633.

2.-

BOSTON, 188

you will place an equal length of wires on poles elsewhere.

If we ask permission for poles, a strong opposition will be developed at once, & after consultation with Brockton citizens we decided to try the back lots first. I will send your letter to Mr. Jenks & ask him to get at some decision at once.

I do not see why this should delay work on building or the laying of mains underground.-

The streets chosen for poles are narrow, with beautiful elms & contain residents who will fight against the disfigurement. The telephone wires all run on housetops or from poles in back lots.

Resp'y W. L. Garrison, Res.

June 12th. 1883

W. J. Jenks, Esq.

Edison Electric Illuminating Co.

Brockton, Mass.

Dear Sir:-

Yours of the 11th. came to hand this morning. I will have an estimate made for wiring the Washburn Block and forward it to you to-morrow sure,

Very truly yours,

Manager.

1883-06-11

Edison Electric Illuminating Company,

OF BROCKTON.

HAS. G. WHITE, President.
W. L. GARRISON, Treasurer.
W. J. JENKS, Manager.

Brockton, Mass. June 11 1883

Thos. A. Edison
65 Fifth Ave.

Dear Sir – I enclose Plan No. 5 (of Washburn Block) where there are several occupants quite interested in our light. The Billiard Hall particularly, if secured, would bring in other similar establishments.

From the letter of Mr. Dusell received today, I judge that our first plans for estimates have been returned to us before this.

Mr. Garrison forwards to me (under date of 9th) yours of the 5th as to poles. Not knowing of your letter, I wrote you 8th several questions which are not answered in yours, so I shall await your more specific reply.

Respectfully
W. J. Jenks.
Manager.

1882-06-15

Brockton Mass. June 15/83

Mr. T. A. Edison

Dear Sir —

Regarding the matters of your late letters to us including

Estimates for Wiring. We wish to be able to give your figures, or a certain percentage of advance on them, as representing to our customers the entire expense of a change from gas to electricity; or else to be so instructed as to the exact basis of your calculations that we can ourselves supplement your figures with such estimates on sockets, shades and globes, as shall cover everything you have not included with the exception of any necessary changes in brackets or other present fixtures. Please therefore reply to the following queries seriatim :—

1. What are we to understand by the terms "specially insulated", "on surface" and "in moulding"?

2. In buildings wired while in process of construction, do we understand you would lay the wires in walls and between floors, as gas piping would be done?

3. Do you put a safety-catch at every tap?

4. Do you figure on 2% loss?

5. In general, with occupied buildings how much does concealed work "within the walls," add to the cost of wiring "on the surface"?

6. In your figures for houses and stores already otherwise lighted, do you include insulating blocks for gas chandeliers, the wiring of these and other present fixtures to be adapted to the new use, and such switches as the diagrams show will probably be required for suspended fixtures &c, as well as a general switch to cut out the building?

7. In special cases, as in the Masonic rooms and Opera House here, we suppose you will indicate and include whatever switches, regulators &c. your experience shows will be necessary.

8. Do you consider it good policy for us to charge for this wiring anything above the actual cost of your labor &c. to us? In other words, would you advise us as a permanent policy, to aim to realize any revenue from this direction, and if so, should we, to avoid discouraging customers or startling people by charging largely more than gas installations cost, make any concessions at the start?

As an illustration of this last question, Dr. Borden, whose 3 houses you have figured on (26 lamps each) can get them piped for gas at $30. each, against $78. for wiring.

To sum up the matter, we desire to receive and suppose you are sending us figures covering all the labor and all the material necessary to prepare a building for the attaching of the service mains and meter at one end and the lamps at the other, excepting the cost of new brackets or electoliers, complete, where such are necessary. This suggests another question —

Q. How are we to calculate the customer's expense of connecting from the street line to the point where your wires (inside) are joined, for underground and for overhead work?

You will see at once that it is essential that we understand each other perfectly in these respects, as your estimate is for the purpose of enabling us, with no previous experience, to give a price for fitting a building throughout, for electricity, or for changing the gas fixtures. We think it likely that it would be much for our mutual interest to go on and see you regarding these matters, or to

1883 06-15 4

meet your Mr. Greenfield, if he is to be in Boston again very soon, and perhaps to have time come here and look over the particular places specified in our applications. Meantime two of them, Mr. Borden's houses and Mr. Bryant's block, are nearly ready for a beginning of our work (if we get the contracts) and you will probably be able to give us by letter such additional information as we need in order to make them definite offers by Monday next.

Overhead Lines. After further consultation with Mr. Larrison, we are directed by him to say that we are satisfied that aside from the electrical features of the case to which you refer, we should encounter serious obstacles in placing poles in the streets, and decide to locate them along the back lines of lots, midway between streets already designated, and on the north side of Pleasant street, in private land in all cases. We will secure the permits as soon as we receive memo. of proper starting points, distances &c.

Yours Very Truly,

W. J. Jacobs, Mgr.

1883-06-19.

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. { P. O. Box 1633.
Pierrepont Wise,

BOSTON, June 19, 1883

Samuel Insull, Esq. Private Secy.
New York.

Dear Sir.

Your favor of yesterday is at hand with copy of letter to Mr. Jenks.

My inference from your answers is that until the station at Brockton is finished & the wires laid we ought not to seek for customers. All right if that is the best policy. We will adopt your methods & policy if you will make them plain.

But, your 5th answer says the cost of concealed work in occupied buildings is about three times above that of surface wiring. –

Enclose letters for Mr. Jenks for your perusal. Please advise about replying to Mr. Miller.

1883-06-19.

2

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. { P. O. Box 1633.
Pierrepont Wise,

BOSTON, 188

Several buildings, now in process of construction desire "concealed work" which can never be done at one third the expense necessary hereafter. They ask us for complete estimates for wiring, cutters, lamps, etc. – We are unable to give particulars & must therefore lose good customers. Why are such details opposed to the methods on which you run your business?

If, according to your 9th answer, the Company should bear the expense of connecting consumers with the mains, why did not your estimates include this large item? – – Let us understand clearly what we ~~should~~ ought to do & we will. –

Resp'y W. L. Garrison,
Treas.

1883-06-01

GARRISON & CO.
WOOL,
No. 137 FEDERAL STREET.
Wm. L. Garrison, Jr. } P. O. Box 1633.
Pierrepont Wise, }

BOSTON, June 21, 1883.

Saml. Insull, Esq. Private Secy.
New York.

Dear Sir. -

Yours of the 20th is at hand & contents noted. As regards Mr. Borden's houses no estimate for fixtures are requested. Only an estimate for wiring to compare with cost of gas piping. But in estimate for wiring, safety catches, etc should be included. As regards connection with consumers' houses I supposed we were to pay up to the premises but the owner to pay within his ground. I agree with you about meter cleaners & would prefer to have Mr. Edison control that part of the business. -

Very truly, W. L. Garrison, Jr.

Edison Electric Illuminating Company

OF BROCKTON.

CHAS. G. WHITE, President.
W. L. GARRISON, Treasurer.
W. J. JENKS, Manager.

Brockton, Mass. June 26 1883

Thos. A. Edison, Esq.
Edison Electric Light Co.
New York

It wont do to engage people above of time we want to gaze upon them yourself

Dear Sir — Yours of 23rd was duly received. Also your letters of same date to Mr. Garrison, which fully clear up all the points about which I expect I have, through lack of knowledge of details of your plans, appeared to be perhaps unnecessarily stupid. Having as I think all the information necessary, I shall send within a day or two a plan of locations obtained for pole lines.

Mr. Garrison defers to your judgment in the matter of help and salaries. I wish merely to mention that at the suggestion of several of your people, and with Mr. Garrison's approval, a young man who has a good start in the shape of a general knowledge of electric bell work and the telephone business, spent about three weeks in the meter department at your Pearl St. station, for the express purpose of fitting himself for the

work here, and that Mr. Gibbs, under whose charge he was placed by Mr. Clarke, reported that he was competent to take charge here when we were ready to commence business.

I think I can also secure a reliable and intelligent fireman living near here for the sum you specify, $1.75 per day, if you desire. Will you kindly drop me a word as to these two assistants, (meter boy, and fireman) that I may know what to do, if anything further, regarding them. A very little instruction would qualify this boy here to do any electrical testing of lines &c.

Yours Respectfully
N. J. Jones
Mgr.

43
June 26 1893
Mr. N. J. Jones
re: New Orleans
letter of 23rd
explaining
everything

44.

July 14 1883

W. L. Garrison

re- the growing demand for Arc Lights at Brockton Mass.

1883 07 14.

Osterville, July 14, 1883.

Sam'l Insull Esq. Pr. Sec'y.
New York

Dear Sir the 7th lamp
Possibly by altering your circuit, we might use it on demand growing in Brockton for some arc lights in a matter for trial send to 65 5th Ave they might send 2 to me
fear a little lovely that way.
Edison Mr. Hosmer, Agent of the Thomson-Houston Co. desires an interview with me to urge the use of his light in connection with the Edison. Of course, I have no idea of adopting any such suggestion but understanding that it is feasible to run a "illous"

arc light on the same circuit with the incandescent system, I write to ask if you advise or object to our mixing the two. Please give me the opinion of the office.

Very truly,

W. L. Garrison

Treas.

1883-07-20

THE EDISON
ELECTRIC ILLUMINATING
COMPANY.

CHAS. G. WHITE, President.
W. L. GARRISON, Treasurer.
W. J. JENKS, Manager.

Brockton, Mass., July 20, 1883

Mr. T. A. Edison
New York City

Dear Sir — Mr. Borden has stated to me, very kindly and very plainly, your objections to recent articles in the Review. Please accept my assurance that your wishes in the matter are understood and your judgment respected. I shall not in future, unless suitably advised, write anything further on electric lighting.

Will you kindly direct me to some work (if there is one) giving details of the proper method of measuring the illuminating power of arc lights.

Very Respectfully
W. J. Jenks.

Don't know of any work containing methods for arc lights — E

44.
July 23 1883

W. L. Garrison

We can have 2 or 3 prominent places running a week before we start with an exhibition that is the beginning of = we shall have to stand cost thus running but with an exhibition will make out a bill & simply accept it, so there will be no further running + there can be no cost of exhibition — Expense in Sunbury & we are getting out an Entirely new line of design to cheapen the running down so that there will be no complaints

1883-07-23.

Boston, July 23, 1883.

Mr. Samuel Insull,
Private Secy
New York. —

Dear Sir.

As the work at Brockton is progressing satisfactorily, does it not seem desirable to secure ourselves some customers? How can we make any sort of an exhibition when the work is complete! In accordance with Mr. Edison's views we have made no effort

to get customers. The cost of wiring being so much in excess of gas piping not a single individual will do it at first at his own risk.

We are not ambitious to get a large constituency at once but do feel it necessary to make a beginning in order to show the light. - Shall we not be obliged to offer to wire some important building at our own expense with the understanding that eventually the wiring is to be paid for if the light proves satisfactory?

Please advise me. -

Very truly,

W. L. Garrison, Jr.

1883-07-27
Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

New York, Sept 1st 1883

Address reply to.....

Mr. Samuel Insull
Sec'y Edison Electric Light Co.

Your favor of the 17th inst

in reply would say that I have carefully looked over my papers and find nothing of Culp & Marcellus Price - if I remember right it was 61 Poles at 22½ apiece $137.25 covering their first requisition for corrugated galvanized pipe which I sent at once - the chairman of the Committee of the Jersey Union also wrote me to Day in relation to furnishing & erecting lights in the Park Non-Commissioning Engine to run a dynamo these lights for week for six weeks - they want ten (10) arc lights on the equivalent - those Parties on Co Dress Socials are held last season and are very successful Many people coming from twenty miles around - the light on this occasion was furnished by the Jersey Co and they propose to have an Electric Light at all events - Now the Committee request me to inquire whether you would furnish the light on Not - and at what hour open night (or about) the park is about Seventy Rods from the Central Station - if possible I think it advisable to furnish the light also would say that the Small Engine and Dynamo could be ready at that time

The Committee request an answer by Telegraph as early as Saturday the 25th as they must to Press about the light at 8 O'clock - Please reply very Truly Your W D Rich
Supt

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

Address reply to.....

1883.

Form M.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Brooklyn, N.Y. 188

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Very Truly Yours

W. D. Rich
Supt

File

1883-08-06

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Bur Rin Aug 6th 1883

Address reply to Bur Rin mass

Samuel Insull Esq

My Dear Sir

Yours favor of the 4th ultimo is at hand entering charge for Steam and Hot water supplies - and the will be given credit for the same - also advise installation at other matters I have not heard from Sprague since Clarke and the Yard they are very anxious to have matters pushed with all possible dispatch I have made arrangement for all material and can commence as soon as the Boiler is on the Spot please advise me relative to fitting up the Motor Room and the Room for the Electrical appliances which is on the 2d Story whether I am to fit them up or they to do it under my instructions

1883-08-06

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

.....188

Address reply to.....

[illegible] walls
[illegible] Rich looking out Sunset
[illegible] by the 18th of September so you can see of these
[illegible] of the Rooms and the machinery is not shipped
[illegible] it and by the Old Colony next shipped by
[illegible] from Fall River. My Foreman says this is
the quickest and cheapest route as all weight has to be
[illegible] Boston at quite an expense the Stonington
[illegible] Rich [illegible]
[illegible] Sent to Day

very Truly Yours
W D Rich Supt

August 24th/83
W. L. Garrison
re- Brockton

1883-08-24

Osterville, Aug. 24. 1883.

Samuel Dasell, Esq.
Private Secy

Dear Sir.

Matters at Brockton seem to be rather at a standstill. What is the delay caused by & when may we confidently expect to start the light?

I hope we shall not be delayed till Oct 1st before having our opening.

Respy
W. L. Garrison.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
405	Mu Rd Spain		

Received at ~~785 BROADWAY~~ 652 BROADWAY

Dated, Boston Mass Aug 24 1882.

To Thos A Edison
65 Fifth Ave

Three tubel Men have
general street permit secured
N. T. Jenks

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

I think we'd better arrange to have some men sent on — Can we use any of the wire at Laboratory to fill Springfield order —

1883 09-04

RECEIVED
SEP 5 1883
ANSWERED
FILE NO.

Brockton Mass
Sept. 4. 1883.

~~Thos. Alva Edison~~
~~U.S. Tel. Construction~~
~~New York~~

Dear Sir:

I have but a few moments to drop you a line concerning affairs at this place.

Station. Thoroughly good one, very convenient, nearly ready save putting in 14 x 14 ½ incandescent which has not yet come. Our own work will be commenced as soon as I have the necessary material and help. Am desirous of making this a thoroughly good piece of work.

Tubes. Are being rapidly laid, and will be ready for all wire at the end of the week.

Inside wiring. It is very essential that there should be no further delay in wiring of this building. Several fine and important business buildings are going up on the end of

1883-09-04

the underground conductor, and the flooring is ready to be laid in about two days in some places. The people are very desirous that the wiring shall be done at once, and Mr. Jenks feels that he would like to have some of Bodwin's men here under you can at once give him some one. Men are needed both for temporary work, and some good inside concealed work. I would strongly urge that three or four good men be gotten here at once from New York or Boston, for when the station is ready there will be nothing ready to light up outside the station. The representation places are thoroughly good paying business in the town, and will make a very fine show. Will send further information by Monday's mail. In trying now Pressure indicator. I am positive I can accurately get potentials, differences, &c, at

1883-09-04

contract station instead of going to terminals. Will refer to this again.
Will want it as soon as possible.

150 ft. #0000 - 1/2
80 - 300 ft. #00
- 700 ~~800~~ ft. #16
50 ft. rubber tube to take #0000 wire.
Rubber and insulating tape.
100 ft. Zeo. 10.
Some solder and hand blow pipe.
Any extra wire can be sent on to next station.
Will send you word about Tuscumbia in morning if running chart. Probably otherwise also.
Better send chart by U.S. and B. Express Co. #940 Broadway.

Yours truly,
H. J. Sprague
Hotel Belmont.
(formerly called Palmer House)

Will write to-morrow.

N.B. Send 200 ft. light wire also

1883-09-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Saratoga Sept 6 1883

Sep 8 1883

FILE No.

Dear Sir:

I send by this P.M. to N.Y. and S. Dupatch Co. express, chart and size for feeder and mains at Racine.

In letter received to-day, mention is made of telegram sent me yesterday. P.M. I have not yet received it, and now scarcely expect to.

I wish 2 plug switches, large size, and also 2 ~~set~~ back plug switches. There are no arrangements for attaching safety catches to feeders at station. Will be more explicit to-morrow.

Put lamp switches are far more convenient and nightly for lighting connection than the single plug switches sent here.

In haste.

Yours &c T. A. Edison

Sept 11 1883

Furnish to Brockton Station one 2¼ horse power & ⅛ h power motor with cord & screw socket,

W. L. Garrison Treas.

Form No. 1.

1883-09-12

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
216			63 gd

Received at 852 BROADWAY.

Dated Brockton Mass Sep 12 1888.

To T A Edison 65 5 Ave

If weather good mains & feeders laid Saturday Jenks wants some additional underground mains in place of poles now will require Kylegist men for that work not for services will write full details & await instructions Jenks also writes today

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-09-12

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
216	2		

Received at 852 BROADWAY.

Dated Want thirty lengths wire service smallest size Sep 12 1888.

To Jenks mails order visit Lawrence this week do not receive deficiencies will Johnson Connection be sent

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-13

Refer Copy this to Bergman & Say this is big coils for Brockton Mass.

Sprague's Regulator — Sept. 13, 1883 —

Mr. Chas. Edison —

Dear Sir:

The feeder equalizer will require for 600 lights on each side per feeder, 2 coils iron each of #2 wire (80656 cm) and 36 ft. long — #4 being a mileage from #4 wire to #2. I have for 500 lights on a side, to give plenty of margin for heating, and also to accommodate more lights. Have not yet gotten the resistance of pressure wire but will from and then.

Very truly yours.

F. J. Sprague

Form No. 1.

1883-09-14

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
119	Fz Cm		1802	1042

Received at 852 BROADWAY. Sep 14 1888.

Dated Brockton Mass

To Major A B Eaton

65 Fifth Ave

Am holding order for fixtures until I can consult with your mining Expert so when will he be here

W. J. Enka

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-18.

RECEIVED
SEP 18 1883

Sep 18/ 3

FILE No.

Brooklyn Hall,
Sept. 15, 1883.

Thos. A. Edison, Esq.
65 Fifth Ave
New York —

Dear Sir — Mr. Sprague telegraphed you on Thursday regarding some two-wire service tubes for smaller buildings. We shall need say 25 or 30 lengths probably, and I think the letter number was mentioned in his message. We shall use some of them very soon if we can have them.

Mr. Garrison also desires to run some service tubes, instead of the pole lines which would be most objectionable. These Mr. Sprague is figuring on and will write you about Monday.

Respectfully Yours
J. M. Jenks — Engr.

BRUCKTON

1883-09-16

Sept. 16 1883.

Thos. A. Edison,
65 Fifth Avenue
New York City.

Dear Sir:

I have to acknowledge receipt of various data from your office and Mr. Insull, and will try to answer all at once - Pole lines - These seem to be on the point of the judge and the Commission, a decided opposition to the system of any pole lines in the Presidential territory - and on account of this local feeling, as it stands in several towns, a considerable difficulty and opposition must be expected in carrying out

1883-09-16

the part of your contract - Mr. Jenks says that poles in the streets are entirely out of the question. The Texas. Law makes it compulsory to grant the right of way for telegraph and telephone wires, but none of course to electric lighting as it is a newer business - But with the advantages of the law, there are very few telegraph or telephone poles in the streets, and these are of small size - I have looked over the ground, and must agree with Mr. Jenks that if permission were granted, pole lines could not be run in once of the streets - both on account of the lines and the narrowness of the side-walks -

Belmont street is open - On the lower the canyon - and be

2

1883-09-16

lines said no poles up that street. They were offensive primarily -

Elm street is narrow, and has trees on both sides, practically covering the road-way, and from 25 to 50 ft, at least, high -

High and Green streets are both narrow, and are obstructed by trees - probably as is Elm -

East Main is cared in the same way. The street next to East Main, and running at right angles to it is open, save a few low trees -

Catch boxes have been placed by Mr. Flemm in the places indicated on his chart, and hence there must be the points of departure for the branch lines selected for or underground - If poles, then the poles must start at the corners of the streets in close proximity to the catch-boxes. From these

1883-09-16

poles the line, if erected, must go by at some impracticable route over some high buildings, or right through here into some one's back-yard. On some of the streets, say East Main, the line would have to be carried along behind the houses on one side, and then to supply the lights on the opposite side, very long wires must be carried over private property, through trees, across the street, through other trees, into the front yards of the people to be cut in. The rights of way would be necessary, the difficulty in getting such, and the local jealousy in the fact that the streets are not defaced by many poles, makes it apparent that ~~such a system~~ an insuperable and difficult piece of work is ready for whoever is to cut any

4.

1883-09-16

pole line, especially as the company has not a single dollar of Brockton money in its treasury, nor a Brockton name on its stock but.

I forcibly have the facts mentioned appealed to Messrs. Jenks and Garrison, that they express themselves as distinctly opposed to the erection of the pole lines.

Mr. Garrison came to me, and asked how much underground could be put in for the cost of the proposed pole lines, if one half the length could be put in?

I could not, of course, give any very definite answer, but I said that I should think not far from that might possibly be done.

Since then I have looked into the matter. The proposed cost I see is, for pole lines, $1640.

This, I suppose, does not take into account the increased

5.

1883-09-16

cost which will almost certainly be incurred by going on the friendly property.

The Flume and his men can keep 30 men actively digging and filling when laying ditches alone, and they can put in from 1000 to 1400 ft. of ditch tubes a day.

The catch boxes are in place, the men used to the work, and if reconnoitered work is done, the main can be laid in a very short time. I feel quite certain that they can be put in, connected, tested, the ditch covered, for in this particular instance, $10.00 per 100 ft. This to include everything over the actual cost of tubes and the freight. I do not have info on the cost of # 5.6 s; but I think it about 50 cts not laid. If this is so, then the tubes of this

1883-09-16

size can be put into the ground for the remainder, or half of the remaining distance at the cost of 60 cts a foot plus the freight – Prices are as follows:
proposed for pole line –

Belmont –	56 lights –	650 ft
Elm	56 "	700 "
High	60 "	750 "
Green	72 "	850 "
———	59 "	750 "
East Main –	56 "	700 "
Total	359 lights	4630 ft

Suppose 1800 ~~ft cut off~~ and ~~the corresponding~~ lights – 139.
This will leave 2830 ft and 220 lights residential – The cost would be $1695 – plus freight – Mr. Garrison said ~~that he~~ he would be satisfied if half the underground length could be put in for the same cost as the overhead.

(Henry Sprague
Brockton, Mass.) 1883-09-16

line proposed — If desiring after starting to extend the underground the remaining 1800 ft, it would cost $1080 — and additional earning of $108 (at 10%) would be required — I feel certain that the small additional and not immediate investment will be more than earned if the underground be put in — Mr. Garrison asks for pay, half the distance — You can for the same money as contractor for pole line (if the conditions so cost so its not paid — put the 418 ft. more than half and only cut off 129 lights provided, all these were taken in on the pole line — Of course, the figures are for you to act on as you see fit — I am certain about the advantage of laying, and the rapidity with which the work

6.

1883·09·16

can be done and I candidly think it will prove the wisest policy in view of all considerations. Mr. Sawyer has already authorized Mr. Jacobs to have about 300 ft. laid on one of the streets which is much obstructed, and he is very desirous that it may be done at once. There will be about 35 – 40 lengths of 56s left over. Mr. Sawyer assured me yesterday that in all probability the regular work will be in by Monday night. If he is to place in the 300 ft. mentioned above, it would be well to telegraph him to that effect, letting him look to me for the position of the mains. Should the idea of putting in all underground or far as the contract sum will allow, meet with your approval, I will leave the measing exact

9.

1883-09-16

arrangements made, and if you authorize me, will come to a verbal or written understanding with Mr. Garrison when he is next here as to the route and length you will put in. Understand, I do not make any request about the matter, but write my ideas on the subject, and make what suggestions as are in my mind, as well as try to reflect accurately the views of Tucson people and Garrison and local people.

Tomorrow, Monday, the finders will be ready to contract at the central station, except leaving space for safety satellites. I am leaving space for the regulator, but of course avoid saying anything on that matter to the wrong persons. I think we shall get up the regulator in some form, although not

10.

1853-09-16

following Andrews' plan – I will not discuss centralizer any more at present, but reserve my opinion to a great extent – There seems to be a misunderstanding about the matter, as I did not propose the automatic, but distinctly opposed it when mentioned at first –

I thing your remarks on lights, and have tried to impress them upon Mr. Jones – I think about the time of starting up there will be about 250 to 300 lights ready wired – although all may not be ready for operating. The lights now being taken at billiard halls, clothing stores &c are a pretty fair class –

I telegraphed you that we would not need Knesis men for service, but on second thought, think they had better put in service for the lights which

1883-09-16

will be ready otherwise - Will you have him telegraphed to that effect - Such service will be worth 5-wire - I have to congratulate you on the 10% at Lenox - I trust that this will hold good -

I will be in Lawrence to-morrow, in company with Mr - Rich, and will this work and your list of things needed - There is an electrical plan here - all I want in to Mr Brown the fuses & lanterns and that I have -

I will mention switches &c needed, received, and to come for this place - Brockton -

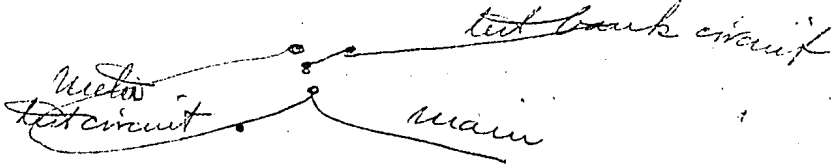
Necessary	Have	Want
8 Feeder -	8	0
4 plug - feeder.	4	0
2 plug - test block:	2	0
12 small plug "	10	2 (ordered)
1 field switch, two way - for spare -	0	1
Lightning plug switches. Have -		

12'

1883-09-16

Necessary	Have	Want
1 Breakdown – (plug or feeder)	0	1
1 Spare dynamo changing –	0	1
50 connection – bolts + nuts –	0	50

There ought also to be a two-way switch, (the old home changing switch) for attaching to the ~~the~~ test bank circuit, to cut in or out the meter test circuit, thus



You make mention of 3 dynamo changing switches. Only want one, let me have the above.

Do you furnish any bracket fixtures for the interior of station? or shall I use temporaries?

13

1883-09-16

The 3-light office chandelier for the office is out of all proportion being very short –

Tested dynamos and engine Friday on telephone – Lamps in station pretty well up with 200 turns of main engine – Exhaust injector worked pretty –

I do not know as how the station can be started until next week, and I suppose you will not get around before then –

I hear nothing about pressure and amperes indication –

I am glad to hear new dynamos are turning out so well –

Shall you put in all 4's at Laurence? or two 200's?

Yours very truly

F. J. Sprague –

14

1883-09-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
210			

Received at 852 BROADWAY.

Dated Brockton Mass Sept 27 1888.

To T. A. Edison

65 Fifth Ave NY

Safety Catches to Carry Hundred + fifty amperes

Graynie

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-22 63

RECEIVED SEP 24 1883
FILE NO. 3

Brockton, Mass.
Sept. 22, 1883.

Thomas A. Edison, Esq.,
New York City

Dear Sir – Yours of yesterday, confirming telegram, is duly received, and we shall make arrangements for the proposed addition of 2800 feet to our system as first contracted for, 300 feet or thereabouts being already laid as a special order.

We think we should have, in addition to Lamps now on hand,

250 16 Candle
12 50 "
12 100 "

Will you please see that they are forwarded to us at once. Mr. Sprague will advise you of our present position. Mr. Garrison particularly requests that some day of starting may be definitely fixed.

Respectfully Yours
W. J. Jacks
Manager

File

Brockton Mass.
Sep. 28, 1883.

Mr. T. A. Edison

Dear Sir

Mr. Sprague is in receipt of a letter from Mr. Ingalls stating your intention of coming to Brockton on Sunday morning. If you come via Fall River you reach here at 8.44 AM. the only train towards Boston during the day.

We have seen no meters as yet.

Mr. Garrison wished me to remind you of the propriety of our showing one or two motors — perhaps one at the station and one in a Sewing Machine room which we are to light at once.

Have the books and special forms needed been ordered for us? I am having some cabinet ~~work~~ made for the safe, and would like to know sizes of books for meter records &c.

Yours Respectfully
W. J. Jacks — Mgr.

~~56~~ 61

1883-10-01

Oct 1/83

H. W. Leonard,
acknowledges receipt
of meter record
blank

Newton Mass.
Oct 1 '83

Thos. A. Edison Esq.
Dear Sir,
Recd the meter record blanks & the bill blanks O.K. yesterday. Have no yet need no tickets, wch go at the top of the meter & wch carry the subscriber's number. Also please forward tags with strings for placing upon the anode plate. Hydrometer not yet recd.

Yours Respectfully
H. W. Leonard.

Form No. 1.

1883-10-01

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
499	Kn	Dy	16 Pd

Received at 852 BROADWAY.

Oct 1 1888.

Dated Brockton Mass 1

To Sale G Edison

65 5th Ave

Have twelve lamps of thirty two candles each shipped here immediately mailed check five thousand dollars Insull

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-01

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
630	Cs	Dy	80 Pd

Received at 852 BROADWAY.

Oct 1 1888.

Dated Brockton Mass 1

To Sale G Edison

65 5 Ave

Station started perfectly success advise

Johnson & Eaton

Insull

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-02

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
76	Cah	76 Paid	906

Received at 852 BROADWAY.

Oct 2 1883.

Dated Brockton Mass 2

To Tate Care Edison 65 5 ave

See Johnson have him send Bradley here by tonight fall River boat with testing instruments to hunt for bugs in under ground. shall be here all day. Insull

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

12-2-1-03

Brockton Mass Oct 3 '85

Mr Tate,
Dear Sir,

I rec'd today per Mr Sprague the Customers Ledger & not having seen a similar one before, I wish you will be so kind as to make me certain as to its correct use.

I presume that the customers name & location goes at the top of the page & that there are two customers to a page. In that case the first column "Number of Meter" will be dittoed to the foot of the column.

I notice that the first half of the page is ruled for 17 months & the lower half for 18 months.

I enclose a page of the

book to you & if you will
be so good as to fill it out
& return it to me together
with corrections in the above
statements if incorrect, you
will greatly oblige
Yours &c
H. Dwight Leonard

58
Oct 3/83
H. W. Leonard
acknowledges receipt
of Customers ledger

1883-10-05

Brockton Mass. Oct 5th 83

Thos. A. Edison Esq.

Dear Sir,

Rec'd today O.K. tickets for the meters of the E. E. I. Co. of Brockton. Also check as per inclosed receipt.

Yours Respectfully

H. Warren Leonard.

P.S. Dags have not yet arrived.

1883-10-06

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
70	Tom	Pd	49

Received at **852 BROADWAY.**

Dated Brockton Mass Oct 9 1888.

To Saml Insull

No 65 Fifth Ave

Have sold Ship Single Core

D. Dynamo to Brockton

We had Cross in one Core

I leave for New York pilgrim

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

to night

DIRECT WIRES.

Edison

1883-10-09

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
533	HG	Sy	19 Pd

Received at **852 BROADWAY.**

Dated Brockton Mass Oct 9 1888.

To T A Edison

65 - 5 Ave

Core received and in place

everything running well send one

dynamo get out to replace broken

one and two more Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-10

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
233	Cash	Paid	146 pm

Received at 852 BROADWAY. Oct 10 1883.

Dated Brockton Mass 10

To T. A. Edison 65 = 5 an

Shall we expect you this week

forward letter from Shamokin

N. J. Jenkin

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form H.

1883-10-11

THOMAS A. EDISON,

Central Station, Construction Dep't.,

No. 65 FIFTH AVENUE,

~~New York~~, Brooklyn Oct 11th 1883

Thos. A. Edison Esq.

Dear Sir,

Your letter of advice in regard to expense sheet rec'd & noted.

I will get the tags for the meters here, as you suggested.

The Meter Dept is now up to the wiring. Mr Lowe hopes meters in place & all seems right.

Will you please send me $35. so that I may have it Sat. morning if possible.

Yours very respfly

Edward Lomund.

1883-10-12

Brockton Mass.
Oct 12/83.

Thos A. Edison Esq.
Dear Sir,

In accordance with your expressed desire, I will speak of the several points in the Meter Dept which in my estimation need correction in the immediate future.

Beginning with the plates I will say that I have met with several in which the soldering of the rod into the plate was so poorly done, that upon amalgamation, the corner of the plate where the rod was entered became soft & brittle & broke off upon handling.

The rods of the plates are in every case too large for the receiving hole in the binding post. This causes considerable unnecessary work in coupling

up the meter bottles.

I have found several cases in wch the lower hole of the meter plate was bored too high up on the plate so that it was impossible to connect up the plate without filing the rubber coupling to fit.

Also shld advise that the hole in the lower coupling washer shld be made larger as the bolt fits needlessly tight.

The rods on the meter plates are in every case too long, so much so that in the cases of the 50 light, 25 light & 12 light meters it is impossible to use them without cutting them off first. As I had amalgamated and weighed a lot of plates, ~~this~~ before noticing this, it caused considerable loss of time in my case as a second weighing was necessary after cutting off the

1883-10-12

rods.

The wooden screw plug in the sides of the meter box are often exceedingly tight, so that injury to the box is apt to result when taking them out.

I shld also strenuously advise that the binding screws in the meter for making connection with the mains, be made with a taper point, for with the square end at present used, it frequently becomes a matter of some difficulty to start the screw.

And in the case of the small short iron screw wch fastens in the plate wch covers the lower half of the meter, it is extremely difficult to handle the screw on acct of its shortness, and square cut end.

In regard to the wooden screw plugs above mentioned, it wld be much better if the hole in them wre made larger.

In building another station, care should be taken not to get a sink made of the material of wch the one here is made. It contains, in what is supposed to be its porcelain enamel, sulphide of lead. Consequently when amalgamating, the sulphuric acid liberates sulphuretted hydrogen, wch attacks the mercury making a black insoluble stain of sulphide of mercury.

Ferrocyanide of Potash gives a blue stain & Potassium Iodide a yellow one so that the sink after a little use does not present a very pleasing appearance.

The troughs for the meters are all made 78" to long.

Very respectfully Yours
Howard Forward.
Meter Dept
Brooklyn.

67 October 12

Form No. 1.

1883-10-13

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
238	wn	B	19 Pd

Received at 852 BROADWAY. Oct 13 1883.

Dated Boston

To Samuel Insull

Care Thos A Edison

65 5 Ave

Send Sample lot fifty Pounds new Cable to Brockton Draw Checks to Jenks as I have Paid Some Claims

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRE. W D Garrison

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

FILE NO.

RECEIVED OCT 20

~~New York,~~ Brockton Mass. Oct 13th 1883

Thos. A. Edison Esq.

Dear Sir,

Your letter of the 12th inst. rec'd this A.M. with check for $25. enclosed.

I has not understood that you wished for such a detailed report of the progress of the Meter Dep't here or shd have informed you ere this. Shall keep you posted fully hereafter.

When I arrived here I found 2112 lamps wired, & the station started with that load of lamps. There were of course no meters in & in very few cases did the meters be connected up without considerable extra wiring, soldering &c. So that it took a long time to bring the Meter Dep't up to the wiremen. In one case, that of Loring & Howards Carpet Store — The wiring

1883-10-13

Form L. 2

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

~~New York~~, ... 188

was so faulty in its arrangement that quite a number of the lamps had to be rewired before I could place the meter.

A practice is being followed here of carrying 3 wires into a house containing above 40 lights. I cannot but ~~that~~ think that this is ill-advised for it necessitates 2 meters for one subscriber, & not only makes the meter work for that subscriber double but also tends to complicate the accounts, as we thus have two subscribers of the same name but different number.

I do not consider that the saving of 2% upon the conductor in the house, balances the cost of putting in & keeping account of, an additional meter.

The increased cost is a great balance

I have endeavored to keep track of the wiring since I came here & know each side of the circuit all the

1883-10-13
Form L. 3

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

later subscribers are on. But in a few cases where all three wires are carried into the place, I am in doubt as to wch & how many lights are upon wch side. I have requested Mr. Sprague to have the one side of the circuit lighted for an hour or so in the day time & shall attend to that next Monday & let you know finally & decidedly concerning the distribution of the lamps.

I wish once more to complain of the quality of the work done by Bergmann for the Meter Dept. There can be no excuse for a person's making a 25-light meter box wch can not be used with the 25-light meter bottle.

I have been obliged to send out

1883-10-13

Form L. 4

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

25-light meter plates ~~cop~~ coupled up in 12 light meter holders. There will be no error resultant from this, but if the 25-light holders are intended to be used as such, ~~they should~~ the meter box must be made fully an inch taller.

I enclose a record of the subscribers having meters in, together with all the information concerning them at present at hand. There are about 300 lights wired at present.

If I have omitted any points you desire to know about, please let me know, Yours very respectfully

H. Ward Leonard.

(1/2, 3/4, shade)

[ENCLOSURE]

1883-10-13

Subscribers Name	Business	Sub's. No.	Number of Lamps	Side of Circuit	Size of Meter	Remarks.
Pratt	Billiard Hall	1	19	B(-)	40 light	(40 light meter with 10 candle lamps corresponds to 25 light meter 16 candle lamps)
"	"	2	19	A(+)	" "	
Hallett	Restaurant	3	28	A	40 light	
Loring & Howard	Carpet Store	4	34	A × B	20 light	Four more lights being added.
"	"	5			20 light	
Howard & Caldwell	Clothing Store	6	17	A	20 light	One half of store still lighted with Geo. Edison lamps to be substituted.
Edgar & Reynolds	Dry Goods	7	46	A × B	20 light	
" "	" "	8			20 light	
Bijou	Billiard Room	9	16	A	10 lights	
Snow	Hardware	10	18	B	10 light.	Going to have 8 lights taken out. Mile :: Have 10 lights
Pereira Bros	Barbers	11	10	A	10 light	Going to have one seven lamp.
Enterprise	Newspaper	12	15	B.	10 light	
J. J. Whipple	Residence & barn	13	31	- - - -	- - - -	
Sleeper & Bryant	Gents Furnishing	14	24.	- - - -	- - - - -	
Bagnell	Drug Store	15	14	- - -	20 light	
Lincoln	— — —	16	- - - -	- - - -	- - - -	
Post Office	- - - -	17			—	

Oct 14th 1883.

1883-10-13

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

To
THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Dealt with Part of this Late

~~New York,~~ Brooklyn Oct. 13. 1883.

Dear Sir

I have to report as follows concerning operations at this station.

We have run every night since starting, the engine being now started about 4.45, and stopped at 12.15, there being at present no demand for lights after midnight. Patterson, one of Mr. Krueger's men, who was recalled from Lawrence to do some underground work, has returned, having replaced one length of tubing on feeder #1, in which one of the pressure

1-

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

wires was grounded. He also superintended putting in some services, and during this work we had two or three grounds and crosses, causing no further trouble than a dip of the lights. His work has not been done properly.

Two services were left in buildings with no capping whatever, and lightly taped. On one building no thread was cut on the end of the wire, and it was left so that no thread could be cut without cutting away part of a stone wall. The other service was left with taped joints wires in a very damp place, next to a staircase up

2.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

and down which it is customary to carry heavy panels - The result was that last night we had a dead ground and cross at this point on account of the wires being jammed together, which cross cleared itself, leaving a ground, by burning off the down wire - Both of these wires are specimens of gross carelessness. They will as far as possible be straightened out to-day, one by replacing the tubing and capping, and the other by capping - I have some difficulty in learning what has been done by men on the line party because if there is any

3.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

trouble, some men are inclined to evade the truth, and because there is some confusion as to whom men on outside work are responsible. Since I am held to for the successful operation of this station, and since a single mistake on the line, underground or house, may cause endless trouble and annoyance not only in this station but to the customers, I take it that I should have an absolute veto on any work which may cause such trouble, and that any suggestion or direction I may see fit to make shall be recognized as authoritative.

While here you suggested that I should leave seen that there

4.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

was no trouble on the mains while Strong was here. When I offered some advice to him on this work, I wasted an hour's argument, and was told that he was working under Mr. Kruesi's and Mr. Langdon's direction. The result was, he connected his lid main and feeder to the catch boxes at the last moment, skid off to Lawrence, and left me with a dead cross on all mains and feeders due to mixing his wire at the valve box at Pleasant St. I found this by a couple of hours work, and temporarily made proper connections, and immediately on Strong's return will have the box dug up, and

5.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

properly connected -

We have had several momentary dips or winks of the light, but on the whole, matters are running very satisfactorily.

As an experiment I have run the entire circuit as a two wire system on the small engine and spare. There is some trouble with one of the spare resistance boxes, causing arcing on its face for part of the revolution, but I will have no trouble making this right.

The dynamos are running well, with moderate heating of bearings - This heating I believe due to the fact that the bearings are scraped to

6.

[INCOMPLETE, PAGE 17 MISSING]

1883-1043

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

a true circle instead of slightly shallow.

The spare core was turned and immediately placed. The machine has since been tested. The old core was shipped on Thursday via Fall River line to #104 Goerck St.

Armington and Sim' engineer was here for two days adjusting the governor, but it does not yet work perfectly. I think with a heavy load it will run better.

There are now about 238 lights connected, besides station, all of which however, not being used since the receivers were put in position.

There are now twelve of them

7.

[INCOMPLETE, PAGE 17 MISSING]

1823-10-13.

Form I.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ~~partially~~ 188

connected up. Places are wired for about 60 more lights, and estimates requested on a good many places. The lights will be popular here, and the gas people are evidently nervous. Amongst the applications are some more from Bryant's building (gas man) in which place two alone are already wired.

Mr. Paine is here now wiring one of the best houses in town. Mr. Whipple. He is assisted by Mr. Lennon and another man. Their work is being quietly, rapidly considering the circumstances, and thoroughly

R.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-17

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

well done. I went over the house this morning, and must express myself as well satisfied with the work. Mr. Paine is a good workman, thoroughly understands his business, and is not afraid of hard work. He will gradually break in local men to assist him, and I feel that through reliance can be placed on him and whatever he does.

With Mr. Johnson I am entirely dissatisfied. I telegraphed you last night requesting his immediate recall. I hope you will not delay in so doing, as matters have now come to that pass which makes immediate

9.

[INCOMPLETE, PAGE 17 MISSING]

1823-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

action necessary. I cannot continue to be embarrassed and troubled by a man who is reluctant, or does not at all obey my directions, and who prefers to pose as an artistic adviser to the local managers, who plumes himself like a peacock and finds more satisfaction in ordering and damning other workmen who know their business fully as well as himself, and better, than in strictly attending to the business for which he was sent here.

Not only this, but he interferes with what is very strictly my own business and no one's else there — An instance occurred last night — when the scenic refused to be forced out. I sent the

10-

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

meter boy and the Superintendent of me if they could locate the trouble, and they came back and reported to me perfectly clearly. By the time they got back I knew exactly how matters stood, everything was all right except one ground, and all lights were satisfactory.

Johnson came and told me the catch boxes should be open, for the cables must be burnt out, &c. &c, and insisted that the service wires were fused together.

With the indications I had, I knew this was not so, and I told him that I knew better, that under the circumstances that it was impossible that it should be so, as I had

11.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

perfect knowledge inside the station what was going on - He became very boisterous, and I told him that he had said enough, and to end it.

Later, a painter who was finishing up some work used a putty knife and burnt it. I did not know that he had used a knife, it being but for a moment, until the flash. I was standing by the dynamos, and Johnson rushed across the room shouting "I told you so". His conduct became so outrageous that I ordered him away from the dynamos - After supper he came to the Office, urgently only bring them, and I told him that

12.

[INCOMPLETE, PAGE 17 MISSING]

1883-1913

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

I did not want him that evening to enter either the dynamo room or office - He said his business was with Mr. Jenks and he should remain - Mr. J. was out of town, and I told him that unless he left, I should have him removed - Thereupon he threatened me because I had told him that what he said was the trouble was impossible, and after warning him, I called up the police station, and had an officer order him to leave.

I told him that I should telegraph for his recall, and he said he would go at once if I would give him money enough to do so - For me, then, that

13.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-18

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

I cannot but strongly protest against his remaining here - You said when here that he would be recalled, but I suppose business matters have demanded your attention - If your contract requires a minimum time for 30 days, you will not do better than let me engage Mr. Paine for the remaining time, at your terms, the local people to resume their engagement with him at the end of that time -

The engineer we have is a thoroughly good man, cool and level headed. This despite the fact that the main engine had to be stopped about two minutes to prevent blowing

14.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

off the cylinder head - At least it was done - This the same afternoon that the core was received, and before it was connected ready to run - This happened when the stoves were closed, and only part of the lights used - No mention was made of it in the papers, and not many know it - I had gone home to supper, and Mr. Jenks and the engineer manoeuvred things - This occurred immediately after a dead-cross - We are using one boiler now, have done so for two or three nights. This first time we had the second boiler with steam up, but stop valve closed.

15

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

I am having the meter board painted according to our nomenclature, and I think the result will be very satisfactory.

The pressure indicators are entirely unreliable. Theoretically they are badly designed for this kind of work, and mechanically they are not up to the mark. Another loose connection has developed in one of them.

I would suggest placing the adjusting screws separate instead of screwed in. Two of them were badly bent, and come at all cause with the auxiliary meter.

This shows lamps well balanced thus far. I would like to know if the remaining

16.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

Pressure indicators are to be of the same style — Every one who has any knowledge of electrical instruments cannot but notice how bare they are —

1 50- light units completed, and 8 faulty units were yesterday shipped to Bergman & Co. Of the latter Mr. Leonard said he would write to Bergman —

Two ampere connections I shall return, not being wanted —

I shall return the metal parts of the broken dynamo oil cup. This was broken when getting in the case —

I would suggest having on hand a couple of spare glass cups to replace in case

18—

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

of accident, as they are much less costly than the whole cup, and the metal parts are not liable to injury -

Since the whole system is so intimately tied together, and no man's work so perfect but that mistake or accident may not cause trouble, I would suggest that you make compulsory as routine work while a station is in the 30-day operation, and if possible after that, nightly written report of the amount and character of all work done by different departments -

1. House wiring -
2. Services -
3. Meter work

Such report to be made by the

19.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13 Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

individuals in charge of each class of work, and to the electrician in charge during the 30-days, and afterwards to the local manager, the object being to make whoever is in charge just as familiar as possible with the actual condition of affairs at any instant, and to enable one to quickly locate any trouble that may arise after a day's work — I find trouble in getting at definite information, especially if requested of anyone acct from New York. I should for the best interests of the work like some explicit authority, and one about which there can be no question — Personal feeling should not be a factor in

20.

[INCOMPLETE, PAGE 17 MISSING]

1883-10-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188.

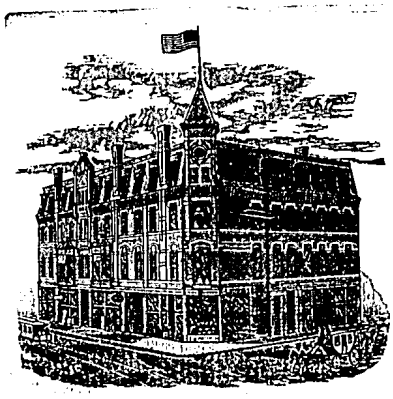
fulfilling our duties in operating a station. Our object should be common to all, and that is to do all that can be done to make this work a success -

Very truly yours.

F. J. Sprague -

21.

1883-10-15



AMERICAN PLAN.

HOTEL BELMONT.

BROCKTON, MASS.

K. McLEOD, MANAGER.

Oct 15th 1883

Saml Snell Esq.

Dear sir,

Enclosed please find itemized expense act. to Oct. 14th & finds there is considerable good Subsoil the other side of Pail right but more than I had any idea of. It is taking one longer than I thought it would on that account and because I have had to be so much growing well as right on to New York contract from Stoughton

Yours Respectfully

G. R. Willey

1883-10-16

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
47	Cook	24 Pd	902

Received at 852 BROADWAY. Oct 16 1883.

Dated Brockton Mass 16

To T A Edison 65 ✓ ✓ ✓

Johnson Healy working mischief forcing best wire man away absolutely declines all responsibility for his future work his immediate recall necessary telegraphic answer requested Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

761

Oct 17/83

M. F. Jenks

Letter re Mr Johnson, work at Brockton Mass

Brockton, Mass.
October 17, 1883.

Thomas A. Edison, Esq.
65 5th Avenue
New York

Dear Sir — I am responsible for Mr. Johnson's detention in Brockton for one day, since the receipt of your recall, to give me an opportunity to gather from his records the statistics of the work done.

I do not wish to advance any special expression as to his work, as he was made directly accountable to Mr. Sprague, but in justice to him I ought to say that he has faithfully attended to any work which I

have laid out, and has always been ready to respond to a call at any hour of day or night.

I am writing this without his knowledge. We are getting on very well, and trust you may be able to spend another day with us, at least.

Respectfully
W. J. Jenks.

1883-10-11

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
New York,

Brockton Mass.
Oct. 11 1883.

Dear Sir,

I have to report as follows regarding matters at this station.

Engine - This is running very smooth now, although there is the occasional variation. We had some trouble tonight on account of the exhaust from the dynamo overflow pass leading into the engine exhaust. The drip pipe from the exhaust rises after leaving the exhaust a considerable amount. The result is that a quantity of water always collects in the exhaust, and on starting up, this is sometimes forced up into the overflow pipe

Tell Rich this occurred twice in Lucerne Hum & Bunsen Pike

1883-10-18

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

on the elevators, and large quantities of water are thrown out from the exhaust after being lifted not over more than 30 feet. This will condense and cause trouble. The ship should fall instead of rising, as then the water would shut off. I should have found out for first on the piping at the elevators.

Elevators – Running well. Have been trouble with a hot bearing ever since the start. If you might repair it get better. Dosed it with oil and sulphur, and used water. Next day had the babbitt scraped – after one slight out, and then showed side-shifting. Running now well down –

1883-10-18

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

Roulin himself 10 men at work. Some of this work is on new buildings which will not be in circuit for from two to four weeks. Mr. Whipple's house will be ready to cut in Saturday or Tuesday, and next week he will probably inaugurate the light for a social dance.

Mr. Johnson left here yesterday P.M. and has a sick wife, disposed of on this. About 24 hours before he left, Mr. Paine went to Fox Lake, and told him that if Johnson remained he must go. He could not stand it. It seems Johnson had attempted to prejudice the men against Mr. Paine, and to belittle his knowledge of how work should be done. I have no

1883-10-18

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

Dear Sir: I had occasion to place some insulating cut outs on Pearl St. near lot, and on testing across with my hands found a very faint tingling — the material of which these plugs are made absorbs moisture, hence is not altogether a good insulator, for these plugs are exposed to the weather, and hence on top of the office in the demand-room atmosphere ought to be dry. The fact remains that they leak, and it can be readily tested by using two of them in a double main circuit, 220 volts up —

Wiring. Mr. Paine now has

Benjamin South's lot of Gas plug
Have opened up the ground
Lenox Avenue

1883-10-18

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

reason to change my opinion about Mr. Paine — nor about Mr. Johnson. One of the latter's ideas, I understand, was to continue the A & B wire on from the first to the second floor of a building, in which lights are already on the first floor connected —

Pressure Indicator. These now indicate 115 when the lights are at 100 candle power — I need not repeat my criticisms —

Yours very truly,

F. J. Sprague.

Name	Business	Sub's No.	No of Lights	Side of Circuit	Size of Meter	1883-10-18 Remarks.
F. D. Pratt	Billiard Hall	1	17	B	40	arranged thus [1]
F. D. Pratt		2	20	A	40	[2]
John Hallett	Restaurant	3	28	B	40	
Loring & Howard	Carpet Store	4	12	A	20	2nd Floor
" " "	" "	5	23	B	20	3rd Floor
Howard & Caldwell	Clothing	6	17	A	20	Meter in basement in barroom
Edgar V. Reynolds	Dry Goods	7	20	A	20	(A) 7 (Cellar) 8 (B) Main Street
" " "	" "	8	25	B	20	
Bijou	Billiard Parlor	9	16	A	20	Meter in closet under stairs
J. C. Snow	Hardware	10	18	B	10	meter in basement
Ferreira Bros	Barbers	11	10	B	10	current thro meter thus ←
A. H. Fuller Prop. Enterprise	Newspaper	12	17	A	10	
J. J. Whipple	Residence	13	31	B	20	20 lights in house, 11 " " barn
Sweatt & Bryant	Furnishing Goods	14	29	A	20	A [⊘⊘⊘] Left hand plug
N. S. Bagnell & Co	Drug Store	15	14	B	20	A ⊘ B [⊘⊘⊘] Right hand plug.
N. E. Lincoln & Co	Clothing	16		A		
Post Office		17	8	A	no meter.	[⊘⊘⊘] Left hand plug (Contract job)
" "		18	8	B	no meter.	[⊘⊘⊘] Right hand plug
John Morton	Wheeler & Wilson Sewing Machines	19	2	A	10	
D. D. Burrell	Photographer	20		A		
C. W. Thayer	Printer	21	4	A	10	
		22		Lamps	A side	141
		23		"	B "	174
				Total	Lamps	315

Howard & Howard
Brockton.

Oct 18th 1883

56

List of Convicts
at Brockton

1883-10-22 87

Brockton Mass. Oct. 22/83

Thomas A. Edison, Esq.
New York City

Dear Sir — Yours of 19th has received your consideration. I think that by the time the additional 2500 feet of underground wires can be laid and connected, and the work of this month properly completed and renewed we shall be able to assume the care of the station. I hope to be able to spend a large portion of the coming week with Mr. Sprague, in getting such points as have thus far escaped my notice. The engineer runs at first-rate, and I think Kimball has got hold of the work in general as well as could be expected. Hope you will soon send us some more reliable indicators. I intend to go to Lawrence when they start.

Very Respectfully Yours
N. J. Jones
Manager.

1883-10-25

THE

Edison Electric Illuminating Company,

OF BROCKTON.

CHAS. G. WHITE, Pres.
W. L. GARRISON, Treas.
W. J. JENKS, Manager.

Brockton, Mass. Oct. 25 1883.

Mr. T. A. Edison,
65 Fifth Avenue
New York City.

Dear Sir:

Matters are running smoothly at this station. The dynamos are started at 3.00 to 4.30 P.M. and stopped at 12.15. The plant is started up at 5.00 P.M. and run till 7.30 or 8.00 o'clock, lights being suitably arranged. We are now reported 353 lights attached, 171 on the A, and 182 on the B side. We had a slight trouble a few days ago with one of Sweet and Bryant's fixtures, one of the samples of Johnson's work. One of the chandeliers would not light up

1883-10-25

THE

Edison Electric Illuminating Company,

OF BROCKTON.

CHAS. G. WHITE, Pres.
W. L. GARRISON, Treas.
W. J. JENKS, Manager.

Brockton, Mass. 188

and on being taken down, the conductor was found to be burned off, and the inside of the pipe gone. It is now all right.

Mr. Kruesi's men are laying tubes and will probably finish tomorrow.

Two 3-light plugs on a three light circuit blew out at the P.O. last night, will soon know whether it was due to a cross or poor plug. Commutator on machine are running beautifully. Have found it necessary to turn scraper bearing of B dynamo.

With regard to the plugs mentioned in recent letter, I made the test which showed leak on new light plugs, recently sent. The old plugs Mr. Jenks says he

1883-10-25

THE

Edison Electric Illuminating Company,

OF BROCKTON.

CHAS. G. WHITE, Pres.
W. L. GARRISON, Treas.
W. J. JENKS, Manager.

Brockton, Mass. 188

return to-day. I also ship back to Dingham two heavy wire amplin connections which I have had no use for.

I enclose statement of expense, and if convenient would like remittance to cover same since Oct. 1st, not having had same and being in an exploded state.

Yours very truly,

F. J. Sprague

P.S. Would like couple pads of construction paper, letter size

F.J.S.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
96	Co	CM	1700	1.50

Received at 791 BROADWAY

Dated Brockton Mass Oct 29 1882.

To Thos A. Edison

65 — 5 ave

Jas Mills leave Mr Leonard here with Mr Spencer to assist him will come tonight or tomorrow

J Sprague

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-28;

Brockton Oct 28th '83

Thos. A. Edison Esq.

Dear Sir,

I wrote to you last Sunday the 21st balancing my account with you to that date, making a balance in my favor of $47.78 & asked that you wld please send me a check for that amt. I have heard nothing in answer as yet.

As I have some accounts to settle before leaving here, I wish you wld please send me immediately a check in full settlement of my account to date.

I enclose my expense acct for the past week.

You will see that a check for $79.50 will balance my account to date. Please attend to this as soon as convenient as I am in need of funds.

The Oxidation is 100 mg in 25-kg

Write him we don't want any Auto Water Heaters, the solution is complicated enough by Weather Conditions and the Circuits thrown together so as to produce the result you speak of = The big Engine Regulator can't not be run from the same circuit as the Customer in the Count

Don't for a moment suppose anything else — there is no more difficulty in run the big Eng & 2 dynamos than one Dynamo & the Extra Cost due to friction is nothing compared to the bad results on meters =

1883-10-28 2

In regard to progress here at Boston: We have 353 lights on the circuit at present 171 upon the A or positive side & 182 upon the B side.

The company have more orders than they can fill as promptly as the customers wish & the customers upon the circuit already are very much pleased with the light.

In a few days I shall have the bills for the first months ready to send out. If you will remember, I had to place quite a number of meters upon the circuit without testing, but if the galvanometric testing at Bergmann & Co's is done with as much attention to accuracy as when I last tested a lot of meters, I shall not expect to find any

of my meters ~~[illegible]~~ recording inaccurately. I shall make a full report concerning the marking the meters as soon as I am able to do so.

We have arranged the customers who use the light after midnight, upon Sundays & early in the mornings as far as possible, upon the B side of the circuit, so that we may be able to run them with the small engine & spare dynamo.

Occasionally some customers upon the A side also desire light. We then close the switch which converts the circuit into a two wire circuit by joining the + & − wires, making them both negative & making the neutral wire positive. Most of the consumers are on the B side & thus their meters record normally. But the few consum-

1883-10-28

ers who may be using the light upon the A side, are not only not paying for it but are actually making money by burning the light, as their meters are reversed.

Seeing the importance of some contrivance to overcome this difficulty, I have devised an arrangement wch will always keep the current thro' the meter in one direction, no matter how the current may go. It is simple & I think efficient & cheap.

It cld be put upon one side of the circuit & thus prevent any trouble from reversed meters. I have made an experimental "current reverser" as it might be called & it works very perfectly & of course automatically.

If you think the idea one worth working up I shall be glad to proceed further with

it, and think that I can make it in such as cheap compact form that it will prove worth adopting as an addition to the 3 wire system.

There is one point in the construction of future stations wch I wish to call attention to. — The balance shld be placed upon as firm a support as is possible & not more than 3 feet from the floor. I had to have the arrangement here altered to suit our convenience better.

There are two experiments going on at Gorrick St the results of wch I shld like as soon as possible. They are — data upon oxidation and the curve of resistance of the solution. The latter is a matter of the most vital importance & we have no reliable curve at present, with the exception of one wch I made while at Gorrick St. When I state that with my curves I obtain an error due to temperature at 40° F of

1883-10-28 6

5.8% while by using the curve formerly in use (and which I know is not accurate) I get a percentage error of less than 2%, you will see the importance of having this matter thoroughly investigated. I do not think that the compensating spools compensate as they should for they were constructed from data obtained from the old curve of resistance of solution which is low. Furthermore this 5.8% error is one in favor of the consumer.

Hoping to hear from you in regard to the matters mentioned above, soon I am Yours very respectfully

H. Ward Leonard.

[ENCLOSURE]

1883-10-28

Expenses, Oct 21 – 28th 1883

Oct 23	—	Letter file	.15
" 25	—	Small flat file	.22
" "	—	Knife	.50
" "	—	Hammer handle	.15
" "	—	Stamps	.20
" 28	—	Allowance (1 week)	17.50
			$18.72
28th to 31st Inclusive 2.50			10.00
Salary 9 days 2.50			22.50
Boston Oct 28th '83		Stewart Leonard	51.22

Write Jenks and ask him that his meter man speaks about 1 Cent per hour ask him if he intends to Charge or 1.1/4.

1883-11-14 /

1C

Boston Mass

Nov 4th 83

We hired him for Meter man until Thos A. Edison took at Goerck St on Dead Sis expenmenting station.

~~I believe my office act to date.~~ (Will not know until upon the 7th)

Upon the 1st of Nov all the meters on the circuit at Brockton were put in and the next month bottles placed.

The record of the meters was perfectly satisfactory and agreed very well with the estimates made.

I rec'd from the Lamp Factory the datum for lamps that one candle minute consumed 200 ft lbs.

This gave with a 109 volt lamp, a resistance of 262 ohms.

Using this as the lamp res. & placing the cost of Electric lighting at 1¢ per lamp hr, I arrived

at a constant of $19. per gr.

The meters of each customer checked as a rule very well indeed, there being only two cases slightly out, differing by 20 milligrams, in a weight of 1.3 gr.

Altho' some of the meters were not tested by weighed deposit, I attribute differences in record of the two bottles to carlessness of the meter man & shall keep the meters in another month & then the record will decide conclusively whether the Error is one due to construction or manipulation.

The sum total of the bills was $150.00 that is from the 13th & later to the 1st.

There seems to be no occasion for my staying in Brockton much longer & unless you think to the contrary, I shld like to come to N.Y. & until the next station

needs me, do some experimenting at Jersey St upon certain points of the meter wch need investigation.

That matter of the resistance of the solution is of radical importance & shld be done immediately.

Expect to run up to Lawrence for a day or two to see the plant there & familiarize myself with Mr. Andrews methods.

Will you please inform me what station I shall likely be called to next.

Yours very respectfully
H. Ward Leonard.

Brockton Mass.
Nov 11/83

Thos. A. Edison Esq.
Dear Sir,
Have been occupying myself of late locating some grounds on the circuit. & upon photometric work.
All grounds are now off & all is working well.
The meter dep't here is running very smoothly.
Last months bills have all been very satisfactory.
One consumer Mr. Ferreira a barber here ~~can~~ kept a record of his consumption & upon figuring up his bill checked my bill within 19¢ & that was in our favor & probably due to the error of oxidation. I made no correction for oxidation as

1883-11-11

I have been expecting the curve of oxidation now being determined at Gorrick St & that it best to wait for it. If I do not receive the curve before the 1st of Dec. I shall allow 100 milligrams for a 25 light melu & other like stations.

Have not as yet rec'd the check for $40. which I wrote for some days ago.

Yours very resp'ly
Edward Leonard.

OM

1883-11-12

Brockton Mass. Nov. 12/83.

Thomas A. Edison. Esq.
New York City

Dear Sir – The fact that our small engine is connected to only one dynamo is the source of much annoyance, and will be the occasion of serious expense if we cannot in some way manage to modify the arrangement. In talking the matter over today, Mr. Garrison requests me to say that we consider this an oversight which should be corrected, both in justice to the idea of furnishing us with a standard equipment, and in your own interest. When the matter of three dynamos was first broached, we were told that the "spare" would be wound for a 220 volt current, and the neutral wire connected to a third brush. If the new system of winding will allow of this arrangement, can we have a new armature and use the present machine? If not, will you not make us favorable terms on an exchange for two smaller ones, of 150 or 200 lights each, which can be run from our small engine without changing its position? At present we have to run our large

1883-11-12

machine till 12 o'clock midnight, and then from 5 to 7.30, 8 or even 10 a.m. in dark days, or else use the small one, reversing the current through the meters on one-half the circuit. We find the ~~economy of~~ saving in running the small engine so much greater than that of the other (with a light load) that we are, during some hours, following the latter plan, as a measure of economy. We are also having calls for light during the day which we cannot fill except at serious loss, and two of our customers are about to take out some of their lamps and put back their gas because we cannot agree to run all day. The Lawrence and Fall River companies will have a decided advantage over us in this regard. Mr. Ford says he will run his small engine from 10 P.M. through the night and following day till 4 P.M.

We have 384 lamps now connected (all permanent wiring) and are wired for 132 more. The cost of wiring is our greatest drawback at present. Please let us hear from you.

Respectfully — W. J. Jacks, Manager.

1883-11-12

Brockton Mass. Nov. 12 1883.

Samuel Cassell, Esq.,
Private Secretary

Dear Sir — Will you please write me as to what books and stationery are covered by the 50 specified in the contract. I wrote you about them Sept. 28, and I think that Mr. Gardson has written once since to know when they were to come. We have received nothing as yet excepting a meter ledger or journal and tickets, and it is important that if we are to receive anything further we have it at once, as memorandum accounts are accumulating.

Yours Truly
W. J. Jenks, Mgr.

1883-11-14

OFFICE OF THE

Edison Electric Illuminating Company.

Brockton, Mass., November 14, 1883.

To Our Patrons:

We desire in the interest of economy to our customers, to call attention to several points which the consumers of the incandescent electric light are very naturally apt to overlook, and which bear directly upon the cost of their illumination.

1. The brilliancy of the arc light in cities has established an impression which it is now difficult to correct, that any electric lamp ought necessarily to develope an illumination of high intensity, and that an assurance that the Edison light shall cost no more than gas means that, for the money heretofore expended for a limited amount of gas-light, this company proposes to furnish a practically unlimited light by electricity. That this idea is not confined to Brockton will clearly appear by a quotation from an article printed in the New York *Post* of October 17, relative to the Edison system which has been in successful operation there since September 4, 1882.

The chief and practically only complaint, according to Mr. Chinnock, the superintendent of the district, is that people burn the light recklessly, and are then surprised that their bills are higher than gas bills. "The public," said Mr. Chinnock, "do not seem to believe that our meters are as accurate as gas meters; as a fact they are a good deal more so. People imagine that it does not cost us anything to give them the light; all that we have to do is to set our engines going, and whether they use more light or less light makes no difference to us; they do not know that every lamp lighted in the district affects us at once in this building. Some time ago we put electric lights into the office of an insurance company with the understanding that the light would cost no more than gas. The president or agent had twice as many electric lights put in as there had been gas lights, and at the end of the first month his bill, to his great astonishment, was double that of his former bills. He came to me to complain. I asked him what he had understood by our agreement to give him as much light for the same money as he had been getting from gas. 'Why, said he,' I thought we were to have all the light we wanted.' I asked him if he had thought that he would be able to keep all his lamps going night and day straight along through the month. 'Certainly,' he replied. That is a sample of the understanding some people have of the electric light. During the last summer we also found that our bills have run ahead of gas bills mainly because people avoid burning gas in summer on account of the heat, but burn our light without inconvenience. Upon the whole, however, our bills are no larger than gas bills when as much care is taken to economize as is taken with gas. Out of 470 consumers, one of them taking as many 450 lights, we have had but eight persons who ordered the light to be taken out since we began running more than a year ago, and we have had but one case of the kind in the last four months.

1883-11-14

2. An impression also prevails that as an electric lamp can be made to yield a light greatly in excess of the power of any gas jet, a few Edison lamps should suffice to take the place of at least twice as many gas burners. We can furnish lamps of five degrees of power: 10, 16, 32, 50 and 100-candles, but our standard lamp is the one of lowest brilliancy, 10 candles, which gives a light equal in illuminating efficiency to that of a good average burner consuming five feet of Brockton gas an hour. This is a different standard from that adopted in previous systems, where the 16-candle lamp has been used, having an efficiency equal to that of average argand burner. This point was specially emphasized at the initial meeting of business men relative to the introduction of our system held at the Hotel Belmont in February last, as will be seen by a reference to the reports by the local papers at that time. It was the 16-candle lamp which was then described as equaling "two 4-foot gas burners in amount of illumination." The higher powers have been shown here in but one or two cases, those used at the opening of Mr. Whipple's new stable being of 32 candle power, and one of 50 candles being now shown in the lantern outside the lighting station on Montello street.

3. The running expense of the light can readily be computed by each customer from day to day. At the meeting referred to it was stated that the policy of the company would include the supply of light at the rate of gas at $2.00 per 1000 feet. This is exactly what we are now doing, furnishing a 10-candle lamp at 1 cent per hour, which would be the cost of a 5-foot gas burner, and a 16-candle lamp, at 1.6 cents, which is the price of two 4-foot burners, or one argand at the same price per thousand.

4. We also call attention to the importance in making permanent electric light installations, and especially in wiring new buildings, of seeking competent advice as to the distribution of the light and the number of lamps. The manager of the Brockton Wiring Company, authorized to do all work of this kind, is an architect and a practical electric light engineer, whose opinions will be found of great value, though they may often differ materially from the ordinary rules of gas light arrangement. The facility with which the Edison lamp may be placed in any position and at any angle, often greatly assists in securing peculiar and striking effects without any excessive expenditure of light. In general, we advise the placing of a good number of small lamps. This does not materially increase the first expense of wiring, and varying degrees of brilliancy may be secured by shutting off individual lamps, while a general diffusion is maintained.

5. Though permanent wiring between floors of buildings already occupied and fitted with gas and water pipes must of necessity be expensive, and the adaptation of old gas fixtures to electric uses requires the utmost care and an outlay of time which must be determined by experience, yet work of this kind is by far the most satisfactory and productive of least future annoyance. Very neat and desirable work can now be done by the use of small ornamental mouldings covering cables of carefully protected wires on the ceiling of stores, offices, and even residences. The list of elaborate gold bronze and polished brass electroliers is now being supplemented by a variety of inexpensive and graceful fixtures adapted to all but the most ornamental styles of work. No one need hesitate, therefore, on the score of first cost until he has thoroughly inquired into the expense of the most recent improvements, which are in the direction of good taste as well as of true economy. Applications to the wiring company or at this office, by mail or in person, will secure without expense, estimates on contracts of large or small size, and will certainly result in an increased intelligence regarding our methods and our work.

Yours Very Respectfully,

W. J. JENKS, MANAGER.

1883-11-17

Insull to C C Lyon
about engine
Brockton, Mass.
Nov. 17 1883.

Thomas A. Edison, Esq.
New York

Dear Sir — Your letter of 15th inst. received with thanks. We have adopted the plan you suggest as to placing the morning subscribers on one side, but we are confident, after three weeks trial of the scheme that there are numbers of lights now regularly burning which we cannot thus cover. The amount thus lost is not however equal to the expense of the coal necessary to produce the additional steam used by the large engine. We could run the small one about three-quarters of the time if we had the two small dynamos, with a saving of 500 pounds or upward, per day. Please lose no time in arranging for the change.

We shall esteem it a favor if you will send at once a schedule of such books and forms as you now intend to furnish, that we

1883-11-17

may be able to procure those which will not come to me in this way, without further delay. When may we expect to receive those which you say are now being printed? I enclose a copy of a circular which I have just scattered about the city.

Yours Respectfully
W. J. Jacks
Mgr.

1883-11-17

Brockton Mass
Nov 17th 83

Thos. A. Edison Esq.

Dear Sir,

In yours of the 16th inst you ask for an exact statement of the customers connected, the number of lights they are burning, the amt of their bills for last month" & speak as tho' I had not sent such information. I have sent you on two occasions complete tabulated lists of our facts & since then such additional facts as the progress of the work permitted. I sent you these statements & supposed that you rec'd them, will now repeat. As to the running expenses of the station, I can only learn that by applying to Mr Garrison & do not consider myself authorized to ask

1883-11-17
2

Fair and a question.

Brockton Meter Dept Report.

Nov 17/83

Name of The Consumer —	Business —	No. of the Meter	No. of Lights	Side of Circuit	Size of Meter	Date of Setting Meter	Amt of Bill for Nov 1st 83
F.S. Pratt	Billiard Hall	1	17	B (-)	40 light	Oct 13	$14.44
" " "	" "	2	20	A (+)	" "	" "	8.51
John Hallett	Restaurant	3	28	B	" "	" "	24.08
Loring & Howard	Carpet Rooms	4	12	A	20 light	" 17	8.64
" " "	" "	5	23	B	" "	" "	12.80
Howard & Caldwell	Clothing	6	17	A	20	" "	7.75
Edgar & Reynolds	Dry Goods	7	20	A	20	" "	11.95
" " "	" "	8	25	B	20	" "	17.86
Bijou	Billiard Hall	9	16	A	20	" "	12.37
J.C. Snow	Hardware	10	18	B	10	" "	4.35
Pereira Bros.	Barbers	11	6	B	10	" 13	7.81
Enterprize	Newspaper	12	17	A	10	" 13	2.87
J.J. Whipple	Residence	13	39	B	20	" 20	17.43
Sweatt & Bryant	Gents Furnishers	14	32	A	20	" 20	8.89
H.S. Bagnall	Drug Store	15	14.	B	20	" 20	2.24
H.E. Lincoln & Co	Clothing	16				" 20	$150.59
Post Office		17	9	A	Contract $125.00 per Annum	—	
" "		18	8	B		—	
Wheeler & Wilson	Sewing Machines	19	2	A	10	Nov 1st	
D.T. Burrell	Photographer	20	3	A	10		

1883-11-17
3

Name of Consumer	Business —	No. of The Meter	No. of Lights	Side of Circuit	Size of Meter	Date of setting of Meter	Am't of bill 10
C.W. Thayer		21	4	A	10 light	Nov. 1.	
Childs	Stationer	22	12	A	10 "	Nov. 1.	
Joslyn Express	Express Co.	23	8	A	10 "	Nov. 1.	
James Hayes	Saloon	24	8	B	10 "	Nov. 1st	
Porter	Saloon	25	7	A	10 "	Nov 9	
		26					
Health Dept	Sanitary	27	3	A	10 "	Nov. 9	
O.O. Patten	Residence	28	20	B	10 "	Nov. 17.	
Bros Gurney	Jeweler	29	7	A	10 "	Nov. 10.	
Wm. Heith	Stationer	30	11	A	10 "	Nov. 12	
L. Andrews	Saloon	31	4	B	10 "	Nov. 12	
E.B. Reardon	Tailor.	32	5	B	10 "	Nov. 17	
			415				

1883-11-17

4.

As regards the contract with the P.O.; they have put on more lights than their contract allows so after the 1st quarter, the contract will cease and meters will be set.

From present indications I judge that the total of the bills for ~~last~~ this month will be at least $200.00 & probably less than $300.00. People who used light lavishly last month will economize this month, so that those bills in some cases are but poor indications of average bills.

We have as the above table shows 415 lights connected.

With the hope that this table will prove satisfactory, I remain,

Yours very respectfully

Albert Leonard.

1883-11-21

Brockton Mass.
Nov. 21, 1883.

Thomas A. Edison, Esq.

Dear Sir -

In answer to your of yesterday relative to experts who have been here more or less regularly during the present month, I have just telegraphed you that Mr. Leonard is at liberty any time and suppose Mr. Sprague will report to you when the new indicators and other matters he has now under experiment, can be safely left for our permanent use. I should prefer to leave the matter at his recall to his own judgment, and think we can get along without difficulty whenever he reports his present special work accomplished.

Yours Respectfully
W. J. Jenks,
Manager.

1883-11-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

RECEIVED NOV 22 1883 ANSWERED

NUMBER	SENT BY	REC'D BY		CHECK
100	Cah		15th Nov 22 1883	1076

Received at **852 BROADWAY.** FILE No. Nov 22 1883.

Dated Brockton Mass

To Thos A Edison NY

Leave for Lawrence today may I draw on you at sight for one hundred dollars

H Ward Leonard

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-22

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov. 22 1883.

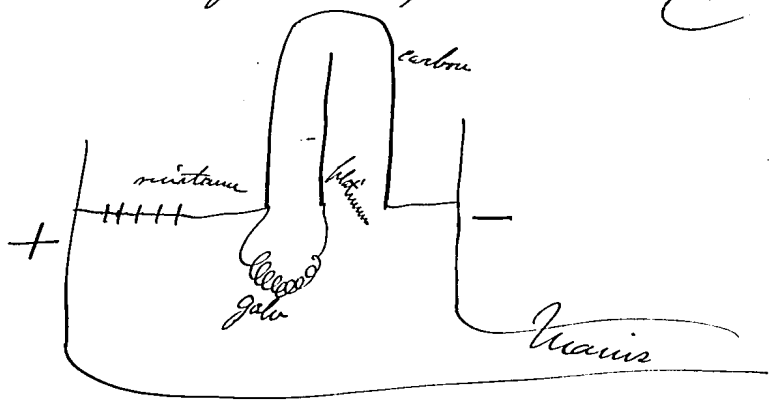
We have put some of the lamps with wire in centre upon the 64 candle lamps & they have proved as good life as the platinum jump-

Brockton, Mass.

Dear Sir: Blocker so its ok

Bergman is getting along

In regard to the 12 on the new installation, I find it as per following diagram



This would seem to indicate that the platinum was positive to the hot carbon, or that the passage of the current was due to

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Form L.

New York, 188

vaporization of platinum instead of carbon. As yet there is no blackening. This test brooks some of my theory about the burners in the lead, but I'll try to look into it. I think there has been a slight drop on the running lamp, but will not yet be positive. Have not broken the lamp yet. When will new indicator be along. Better send eight finishing so that they will all be alike. Need one more very much.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Everything running smoothly. Demand not lower than 1000 shares —

Yours very truly,
T. A. Edison.

P.S. As telegraphed, am certain of the success of the new indicator — Will send house order to-morrow — T.A.E.

1883-11-24

Brockton Mass.
Nov. 24, 1883.

Thomas A. Edison Esq.
New York

Dear Sir — We wrote you a week ago today as follows:—

"We shall esteem it a favor if you will send at once a schedule of such books and forms as you now intend to furnish, that we may be able to procure those which will not come to us in this way, without further delay. When may we expect to receive those which you say are now being printed?"

We have received no answer whatever to this inquiry. As the first day of the third month of our work approaches, we are anxious to secure what we should have had at starting, and if we can know what you propose to furnish as the result of your experience, we can go on and get here whatever is lacking. Will you kindly attend to this at once, and let us hear <u>something</u> from you.

We are anxious that if it can be so arranged, Mr. Sprague can be here and make the new connections for our small dynamos. We are led to believe by what you write, that we can know something definite regarding them very soon and are waiting in hope that we can speedily see our way out of our present embarrassment in the matter of the cost of the light we are furnishing during two-thirds of our running time.

Please send the figures relative to the proposed exchange.

Yours Respectfully
W. J. Jenks.
Manager.

1883-12-08

Mr. Campbell,

You should figure on the dynamos for Brockton as per enclosed, and report to Mr. Tate at the earliest possible moment.

S. Insull,

December 10th, 1883. per G. D

[ENCLOSURE]

Brockton, Mass.
Dec. 6, 1883.

Thomas A. Edison
New York

Dear Sir – Yours of 4th relative to two small dynamos is received with much satisfaction. I send enclosed a rough pencil sketch of floor space, giving accurate measurements. I have also sent to Mr. Sims, at his request, a duplicate of this diagram. One of his men is expected here tomorrow to regulate the small engine, and I presume some definite plan will be made.

We trust the 200-light machines will reach us at an early day.

Yours Respectfully
W. J. Jones
Manager.

[ENCLOSURE]

1883-12-06

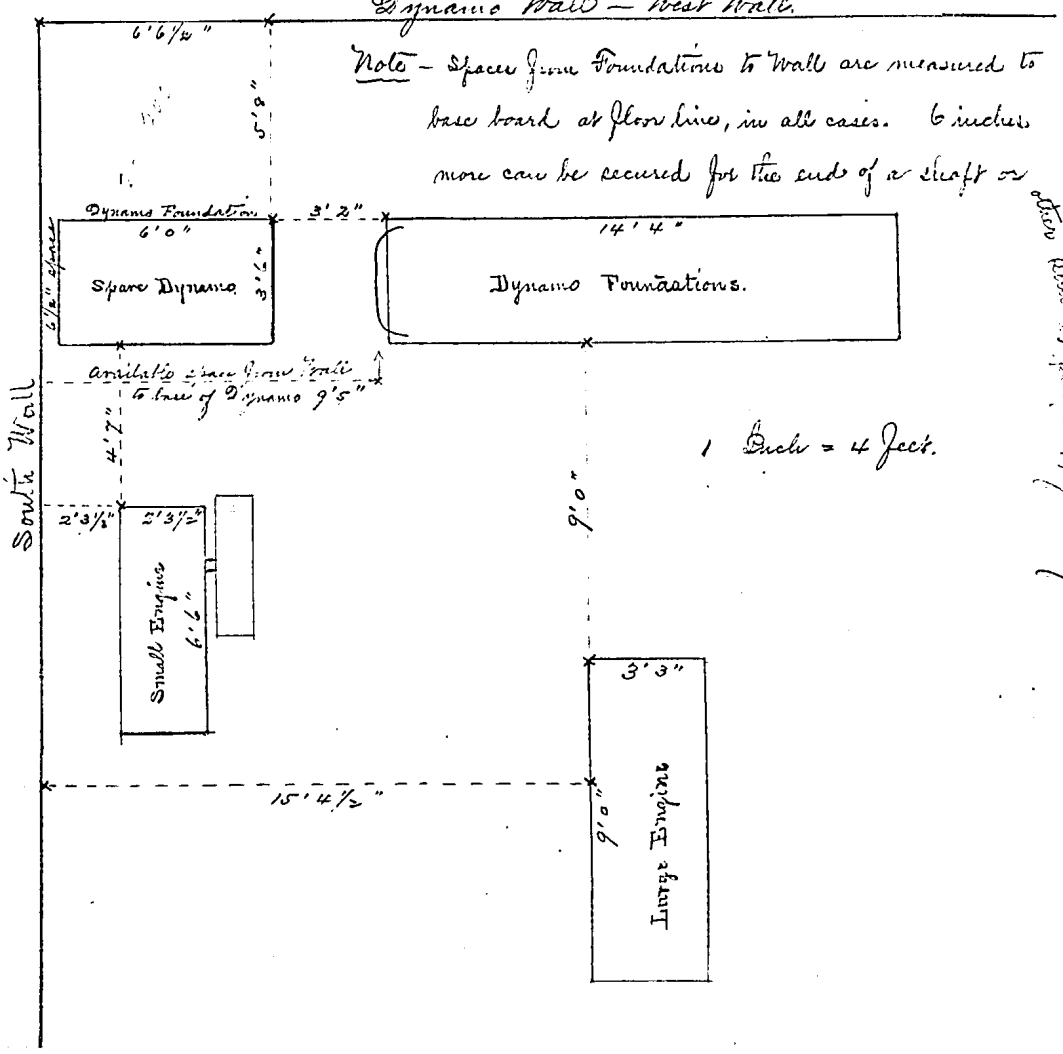
THE EDISON
ELECTRIC ILLUMINATING
COMPANY.

CHAS. G. WHITE, President.
W. L. GARRISON, Treasurer.
W. J. JENKS, Manager.

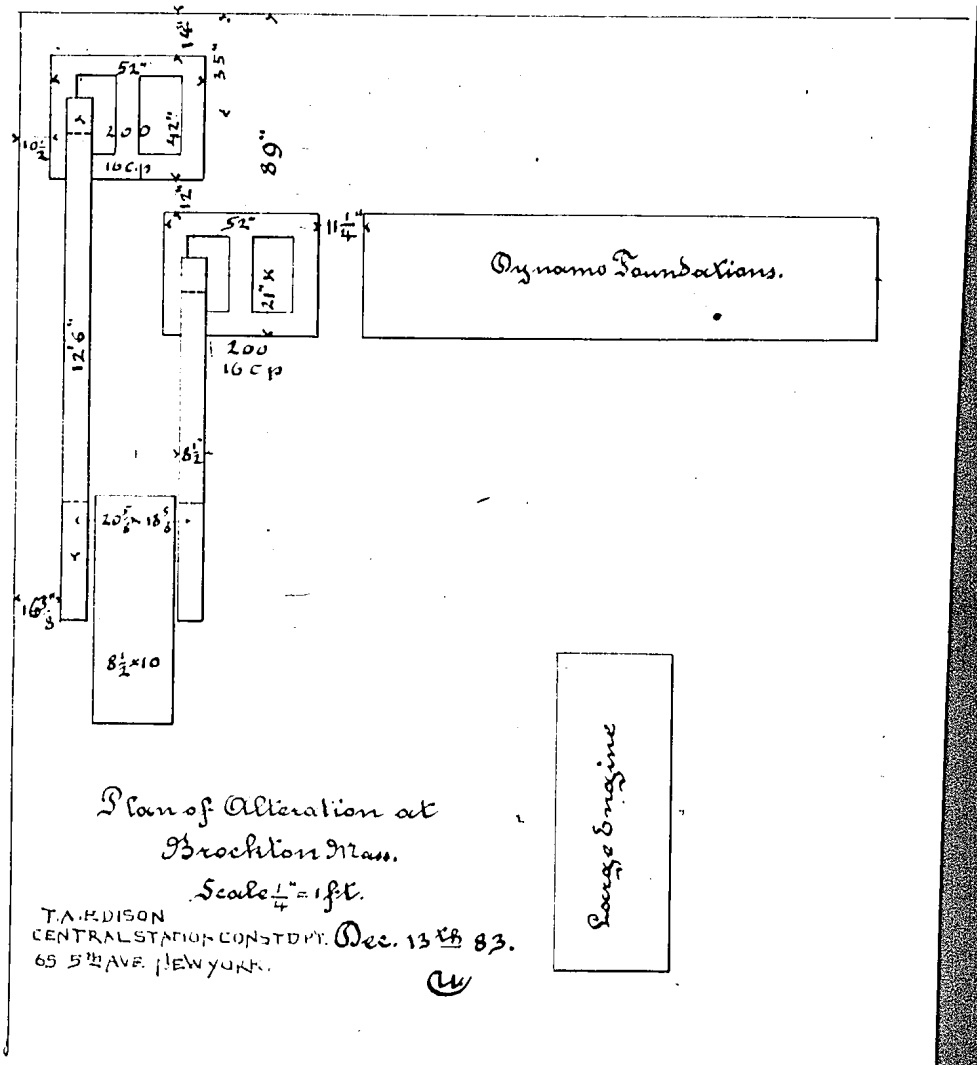
Brockton, ... 188

Dynamo Wall — West Wall.

Note — Spaces from Foundations to Wall are measured to base board at floor line, in all cases. 6 inches more can be secured for the ends of a shaft or other piece by cutting into the brick work.



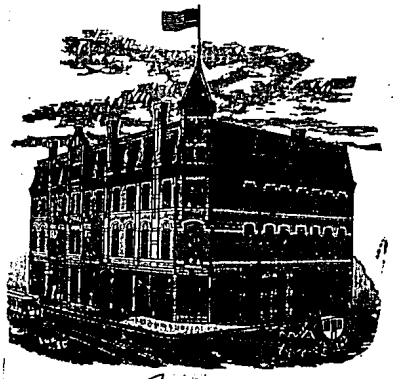
1 Inch = 4 feet.



Plan of Alteration at
Brockton Mass.
Scale 1/4" = 1 ft.

T. A. EDISON
CENTRAL STATION CONST. DPT. Dec. 13th 83.
65 5th AVE. NEW YORK.

1883-12-29



AMERICAN PLAN.

HOTEL BELMONT

BROCKTON, MASS.

K. McLEOD, MANAGER.

Brockton Dec 29 1883

F. R. Upton Esq
Dear Sir
Sprague's plan of this
I got a set of readings here last night as follows - Feeder #2. A side varied from 121½ to 127 during the evening - B side from 121½ to 129 - Feeder #3. A side from 118 to 121 - B side from 120½ to 123½ - Lamps are 109 Volts - These readings are taken on pressure wires & show volts at ends of feeders. The leakage here is large - so they say - but no record

A. V. Howell
Dec 29

has been kept so they could not give me figures. things are being systematized now Station running well but not paying - I take Fall River Knight -

Yours John W. Howell

They regulate here by means of a "Sun indicator" which "Edison says is exact" they also have a photometer which has showed 28 & 29 candles all along but the indicator was right so they thought the photometer was wrong -

J.W.H.

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Massachusetts - Fall River (D-83-047)

This folder contains correspondence, agreements, cost estimates, and other documents relating to the construction and operation of the Fall River central station, which opened on December 18, 1883. Many of the documents are by Edison employees William S. Andrews, Spencer Borden, W. D. Rich, and H. M. Doubleday; and by W. H. Dwelly, Jr., treasurer of the Edison Electric Illuminating Company of Fall River. Some of the documents by Andrews are partially illegible due to water damage.

Approximately 90 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence regarding orders, employee expenses, and routine financial transactions.

B. F. RANDALL,
COTTON.

10 883-05-03

FALL RIVER, MASS. May 3rd 1883.

Randall to
Mr Lizzie Borden Borden

Dear Sir

Got your letter on my return home - Goats Tuesday. Have could not reply sooner.
The building referred to cost about $2000. - including of the office & concreting the floor. Size 50 ft by 150. - roof covered with same material. It was built during a period of great depression during the winter of 1866 & 7.
Markham Leffels Sons supplied the iron. They are in Clifford N.Y. They are the cheapest in price.
Should you build I advise you to let the seller of the iron put it on. Those know how to do it shall not leak. Be employed

a local tinman – who
did not complicated his
work & the roof always leaked
a little. If you desire I can
give you a hint – in putting
on the roof that will shut
out water in any event.
Don't attempt to build of
corrugated iron walls & houses
There is the dangers that
would be if full of wood &c
from condensation.
Dole Chronometer gives you the
detail if I can be serviceable
Yours
J. F. Randall

Form No. 1.

1883-06-04

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
239	Az	n	BJd	110

Received at 852 BROADWAY. June 1 1883.

Dated Boston 21

To Samuel Insull 65 fifth Ave

Mr Rich in fall River leaves

for newyork tonight

Borden

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-07-13

Box 3311, Boston, Mass.

Edison Electric Light Company
AND
Edison Company for Isolated Lighting.

Spencer Borden, Manager
New England Department.
Herald Building.

Boston, Fall River, July 13/1883.

Samuel Insull, Esq.
#65 Fifth Avenue N.Y.

Dear Sir:

Mr. Borden has shown me your letter of 11th inst. regarding Fall River estimate.

If you will send two or three copies of Lowell and Brockton statements of Expenses &c and give me the basis on which they are made, that is; depreciation of Lamps, Brushes &c. the quantity of light delivered per H.P. and proportion of coal and water consumed hourly I can very readily figure it out.

As I understand it we are to be so arranged here as to run through the night eventually.

Yours very truly,
M. H. Donelly, Jr.

Box 338

1223-09-01

NEW ENGLAND DEPARTMENT.

BOX 3311. BOSTON, Mass. HERALD BUILDING. SPENCER BORDEN, Manager.

Boston, September 1st, 1883.

T.A.Edison Esq.

65 Fifth Ave.

New York City.

100 Pt STENOGRAPHIC

Dear Sir;-

Your favor of 30 duly received; many thanks for your suggestions. I think there is misapprehension in your mind as to the conditions under which wiring is to be undertaken in Fall River. You will remember we had an exhibition plant running there for several months, and the people in Fall River are entirely familiar with the light. They are therefore very anxious to have it at the earliest possible moment, and are willing to pay for wiring, and make contracts to buy the light.

Some of our best men live in Fall River, and at least two of our good foremen of wiring, are subscribers to the stock of the Fall River Co.. There seems to be therefore, no reason under the circumstances , why we should not go right along with the work. The largest hotel in Fall River, the largest dry goods store, and all the city buildings will contract to take the

1883-09-01

light immediately. The Mayor of the city, is clerk of our corporation, and the Chairman of the committee for lighting public buildings one of our subscribers.

It seems to me the conditions are especially favorable for having an assured income for the Fall River station from its start.

The blue print plan of North Adams, is duly at hand, and I will send to that town for mem., of the price and location of lots for the central station as soon as possible.

Yours very truly,

Spencer Borden, Manager.
U. E. Dept.

Form No. 1.

1883-09-03

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
259	R	BJ	12 Sh	

Received at 852 BROADWAY.

Dated Boston Mass Sept 3d 1883.

To Saml Insull 65 5th Ave NY

Fall River directors in Lawrence today will write you later in the week

S Borden

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-05

EDISON ELECTRIC LIGHT COMPANY
AND
EDISON COMPANY FOR ISOLATED LIGHTING.

FILE NO.

NEW ENGLAND DEPARTMENT.

BOX 3311. BOSTON, Mass. HERALD BUILDING. SPENCER BORDEN, Manager.

Boston September 5th, 1883.

T.A.Edison Esq.

65 Fifth Ave.

New York City.

Dear Sir:-

Your favor of 4th, inst., received, and I will send your instructions to Mr Dwelly, advising him if he needs any explanation of the same, to consult with Mr Sprague, who is now in Brockton.

Yours very truly,

Spencer Borden, Manager.
N. E. Dept.

1883-09-07.

EDISON ELECTRIC LIGHT COMPANY

EDISON COMPANY FOR ISOLATED LIGHTING.

NEW ENGLAND DEPARTMENT.

BOX 3311. BOSTON, Mass. HERALD BUILDING. SPENCER BORDEN, Manager.

File

Boston, Fall River, Mass.
Sept. 7th 1883.

Thos. A. Edison, Esq.,
#65 Fifth Ave. New York.

Dear Sir:-

Maj. Eaton was present at a meeting of Directors of the Fall River Co. here, this afternoon and arranged the details of a contract between our local Co and the Light Co. to be signed next week. Our Directors propose to immediately put up a Station and lay underground conductors for 4800 lights, equipping the Station with engines, dynamos &c for 1600 lights. We have not yet been able to decide

EDISON ELECTRIC LIGHT COMPANY

EDISON COMPANY for ISOLATED LIGHTING.

NEW ENGLAND DEPARTMENT.

BOX 3311. BOSTON, Mass. HERALD BUILDING. SPENCER BORDEN, Manager.

Boston

on a site for our Central Station, but have several places in view the relative merits of which as regards distance, price and water, we want to discuss with you and settle at once

In order to hasten this business the committee of three of the board will visit you on Tuesday next. Please write me to-morrow or wire me not later than Monday noon if you can meet us.

Will wait Monday

Very truly

H. H. Sewell. Jr.

Box # 338

Telegraph c/o Gray Hos — Fall River

1883-09-26

27

Sep 27 1883

FILE No.

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. Sep. 26 1883.

Saml. Insull. Esq. Secy.

Dear Sir:-

I learn from Mr. Borden that Mr. Edison is expected in Boston the last of this week. That being so, I beg to suggest that he will bring the estimate for our Central Station with him and our Executive Committee will meet and consult with him regarding it.

Be careful to itemize all parts of the estimate fully, for such a one as was formerly submitted (4800 lights) would be of little use and its settlement cause unnecessary delays that we can ill afford at this time.

To-morrow night I will send you a surveyors map of the lot for Station

Yours very truly,

W. H. Dwelly, Jr Treas.

1883-09-27

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. Sep. 27 1883.

Thos. A. Edison, Esq.,
Brockton, Mass.

Dear Sir:-

Your telegram came yesterday during my absence from the city. I endeavored to telegraph you the distances and size of our lot for station this morning but failed to find the surveyor in time to be of any use.

I now enclose a tracing showing location distances &c from which you can estimate accurately. It is proposed to place the building on the rear of lot reserving a driveway to it. The tenement will be fitted for one of our employees.

Yours very truly
W. H. Dwelly, Jr. Treas.

Our committee will meet you at Brockton on Monday.

1883-10-04

MEMORANDUM OF AGREEMENT made this fourth day of October 188 3 between the Edison Electric Illuminating Company of Pall Mall hereinafter called the party of the first part, and Thomas A. Edison, of the City, County and State of New York, hereinafter called the party of the second part.

The party of the second part upon receiving permission from the Edison Electric Light Company of New York, agrees to furnish and install at Pall Mall County of Bristol State of Massachusetts for the party of the first part, an Edison Electric Light Central Station Plant necessary to furnish a maximum of 1600 lights of ten candles each over a system of Underground Mains Co as per the map hereunto annexed (marked Exhibit A and showing the feeders and conductors in red lines) for the sum of Nine [illegible] Dollars according to statement of labor and material hereunto annexed (marked Exhibit B).

In consideration of the party of the second part undertaking to furnish and install said plant, the party of the first part hereby agrees to pay the party of the second part as follows: Ten per centum of the before named [illegible] Dollars upon the signing of this agreement, [illegible] per centum of said amount when the installation is ready to supply light, and the remaining [illegible] per centum when the installation has been in condition to supply light thirty days.

It is further agreed that the title of the property covered by this contract does not pass from the party of the second part

1883-10-04

to the party of the first part until all the terms of payment herein provided for shall have been complied with.

The party of the second part further agrees to use due diligence in putting into practical operation the said installation and to do all work in connection therewith in the best and most workmanlike manner and in compliance with the requirements of the Engineering Department of the Edison Electric Light Company of New York.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals the day and year first above written.

The Edison Electric Illuminating Company of

by President.

Treasurer.

Witness to signature
of Thomas A. Edison.

Estimate No.16,A.

EXHIBIT "B" WITH CONTRACT BETWEEN THOMAS A. EDISON AND THE EDISON ELECTRIC ILLUMINATING COMPANY OF FALL RIVER, MASS.

DATED OCTOBER 4th 1883

Thomas A. Edison
By Paul Gravell
Attorney

ESTIMATE FOR THE ERECTION OF CENTRAL STATION EDISON ELECTRIC LIGHT PLANT AT FALL RIVER, MASS.

1600 LAMPS OF TEN CANDLE POWER EACH.

BOILERS.

One pair 73 H.P. Babcock & Wilcox boilers, set in one battery	$ 2,946.90	
Setting two 73 H.P. boilers, including material	517.50	
Bottom foundation for two 73 H.P. boilers	157.55	
Boiler hearth for two 73 H.P. boilers	48.30	
One No.1 boiler feed pump	104.93	
Foundation for feed pump	26.45	
One No.6 exhaust injector	150.07	
Stack for 438 horse power	212.75	
Foundation for same, including 14' brickwork, with firebrick lining and iron cap	174.76	
Hoisting and guying same	97.75	4,436.96

ENGINES & DYNAMOS.

One 8½ x 10 Lawrence engine with two 48" driving pulleys	850.00	
One 14½ x 13 Lawrence engine with two 66" driving pulleys	2,240.00	
Unpacking and setting up same	115.00	
Foundation for 8½ x 10 engine	70.00	
Foundation for 14½ x 13 engine	179.40	
Foundation cap and washers for 8½ x 10 engine	30.39	
Foundation cap and washers for 14½ x 13 engine	72.33	
Foundation bolts and pipes for 8½ x 10 engine	7.69	
Foundation bolts and pipes for 14½ x 13 engine	24.84	
Two 800 light (10 candles each) dynamos	3,450.00	× 2
Two 400 light (10 candles each) dynamos	2,415.00	×
24 extra brushes	27.60	×
Two belts for 800 light dynamos, including splicing	99.36	✓
Two belts for 400 light dynamos, including splicing	71.76	✓
Unpacking and setting up four machines	184.00	9,837.37

BOILER & ENGINE ROOM SUNDRIES.

One tubular steel barrow for 250 lbs. coal and two shovels	18.50	
Carried Forward	18.50	14,274.33

Brought Forward...$	18.50-	14,274.33
Boiler ladder.....	5.00	
Water piping from street main to boiler, meter and engine room and to bearings, and also water piping to river.....	46.00	
Two sets of oil cans and trays.....	12.00	
Double oil cabinet.....	31.50	
Minute glass.....	.75	
Double dial speed indicator.....	4.80	
One 4½" vise "Prentiss" with challenge pipe grip.....	13.30	
Six files.....	3.00	
Two wrenches.....	2.40	
One machinist hand hammer.....	1.25	
Two cold chisels.....	1.20	
Two scrapers.....	1.50	
Two screwdrivers.....	.90	
Drip pans and piping for waste oil.....	23.00	
One pair 8½ x 10 crank pin boxes.....	10.00	
One pair 14½ x 13 crank pin boxes.....	10.00	
One pair extra boxes for 800 light dynamos.	30.00	
One pair extra boxes for 400 light dynamos.	28.00	
Steam connections from boilers to engines, pump and one injector, exhaust piping from engines and pump to main exhaust pipe and covering for steam pipes.....	1,380.00-	1,623.10

TESTING & REGULATION, SWITCHES & INDICATORS.

Bank of 300 test lamps.....	69.00	
Board, wiring and switches for same.....	78.77	
Two sets of regulators for four machines, (two each).....	460.00	
Twelve feeder switches.....	86.25	
One dynamo switch for changing circuit.....	28.75	
Equalizers for feeders.....	690.00	
Six house changing switches.....	34.50	
Eight feeder indicators.....	204.70	
One main balancing ampere indicator.....	24.03	
Break down switch.....	7.18	
Switch for meter test.....	6.90-	1,690.08

METERS & METER ROOM SUNDRIES.

50 meters for six lights.....	338.10	
40 meters for twelve lights.....	276.00	
20 meters for twenty five lights.....	141.45	
3 meters for fifty lights.....	32.95	
1 meter for one hundred lights.....	25.30	
Thirty extra assorted bottles.....	7.59	
Thirty extra plates and rubber attachments.	16.21	
One retort stand and funnel.....	2.76	
Still for water, capacity two gallons.....	12.88	
Two hydrometers.....	.92	
Carried Forward...	854.16-	17,587.51

Brought Forward...$	854.16-	17,587.51
One dozen test tubes, assorted.....	.60	
Balance for weighing meter plates, with set of weights.....	102.63	
Druggist scale with tin scoop.....	6.90	
One thermometer.....	.92	
One enamelled sink for meter plates, 30 x 18 x 6.....	7.33	
Two one gallon bottles.....	2.48	
One graduated 8 litre bottle.....	1.38	
One sealing tool and 1000 seals.....	7.47	
25 lbs. sulphate zinc.....	5.17	
3 lbs. distilled mercury.....	1.75	
4 oz. marine glue.....	2.07	
Supply of chemicals and one carboy for distilled water.....	17.25-	1,010.11

TEMPORARY FIXTURES.

150 temporary fixtures with sockets and shades.....	271.68	
40 joints for insulating chandeliers.....	18.40-	290.08

BUILDING FOR CENTRAL STATION.

Brick building containing office, boiler room, engine room, ~~regulator room~~, dynamo room, meter room and necessary fittings.....	2,950.00

STREET INSTALLATION.

Underground:- Mains, feeders, junction boxes, service boxes; compound for same, opening streets, laying tubes and refilling ditch as per red lines on map for 3666 lights.....	16,951.02

SUNDRIES.

Carrying feeders to switch board in station, carrying pressure wires to indicators and wiring for electrical connections in station.	258.75	
Wiring and fixtures for ten lights in station.....	57.00	
Special forms and special stationery for use in conducting business.....	57.50	
Office furniture.....	55.20	
Tools for repairs to underground conductors.	74.75	
Freight, cartage and expressage.....	644.00	
Carried Forward...	1,147.20-	38,788.72

Brought Forward...	$ 1,147.20-	38,788.72
Clerical work, engineering expenses, sundry travelling expenses in connection with erection of system, canvassing town, making map and electrical determination....	488.75	
Superintendence of construction of buildings and erection of system.....	287.50-	1,923.45

STARTING STATION.

Salaries of electrical, motor and engineering experts for thirty days to teach permanent employees. Hotel and travelling expenses of above.....	672.75	
Supplies for thirty days, coal.....	103.84	
Cotton waste.....	9.20	
5 gals. cylinder oil.....	7.68	
5 gals. machine oil.....	4.24	
500 lamps of ten candle power each.....	300.00-	1,097.71

Total.....$41,809.88

Form No. 1.

1883-10-04

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after filing the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
525	Ka	Dy	10 Pd

Received at **852 BROADWAY.**

Dated Fall River Mass Oct 4 1888.

To Samuel Insull

Secy 65 - 5 Ave

Just received Contract will be signed tonight and forwarded tomorrow

Al H Swift Jr

Treasr

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-05

RECEIVED
OCT 6 1883
ANSWERED
188
FILE NO.

THE EDISON ELECTRIC ILLUMINATING COMPANY

ROOM 29, BORDEN BLOCK.

A. F. Dow, *President.*
W. H. Dwelly, Jr. *Treasurer.*

Fall River, Mass. Oct 5 1883.

Thos. A. Edison, Esq.,
#65 Fifth Avenue, N.Y.

Dear Sir:—

Your valued favors of 4th inst enclosing estimate for central station together with exhibits and contract covering same have been received.

I return you herewith a copy of the agreement duly executed, retaining one for our files. Also I beg to hand you our check on National Union Bank, Fall River, for $4,180.98 (Four thousand one hundred and eighty & 98/100) being ten per cent of the amount of estimate.

Kindly acknowledge rect. and oblige,

Yours very truly
W. H. Dwelly, Jr.
Treas.

1883-10-12

W.E.Dodge, Pres.t G.P. Cowles, Vice Pres.t & Treas. A.A. Cowles, Secy.

Ansonia Brass & Copper Co.

Nos 19 & 21 Cliff Street

P.O. Box 2375.

New York Oct. 12th 1883

Stenographic Letter

Samuel Insull Esq.

65 Fifth Ave, City.

Dear Sir:

I have received your two favors of Oct. IIth enclosing copy of Power of Attorney and copy of Fall River contract, for both of which accept my thanks.

I remain,

Very truly yours,

A.A. Cowles, Sec'y.
by Van Zandt.

1883-10-15

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Oct 15 1883

Address reply to Junction of Broadway & Hartford

RECEIVED
OCT 15 1883
ANSWERED
Oct 16 1883
FILE NO.

Dear Sir

[illegible] from Petition which I have [illegible] to map out for [illegible] and [illegible] for [illegible] United States all of which has been completed and the map is [illegible] — [illegible] the Red print sent me [illegible] that the Poles have must be 6' 10" longer than the plan calls for as you will see by the sketch which I enclose — on the B print you will see there has been no provision made for using the cleaning Doors and two feet is as little as can be allowed then the single furnace 146 H.P. B boiler — according to A & A' figures require 10' 2" Stack

1883-10-13 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't.
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

2

.....188

Address reply to.....

Mr Edison — in your position — if the change is to be made (and I see no other way out of it) the steam pipe between the boiler and first engine should be lengthened two feet — also the Order of the change in pipe orders should be given at once — also send me Dimensions and height of each Section of pipe ordered in more given on the B.P. which I have — elegant of Lucas just came to hand thanks for the same — Mr Andrews is hurrying the fitting up of Station with all Dispatch I shall put Steam on Engine this afternoon

Very Truly Yours
W. D. Rich

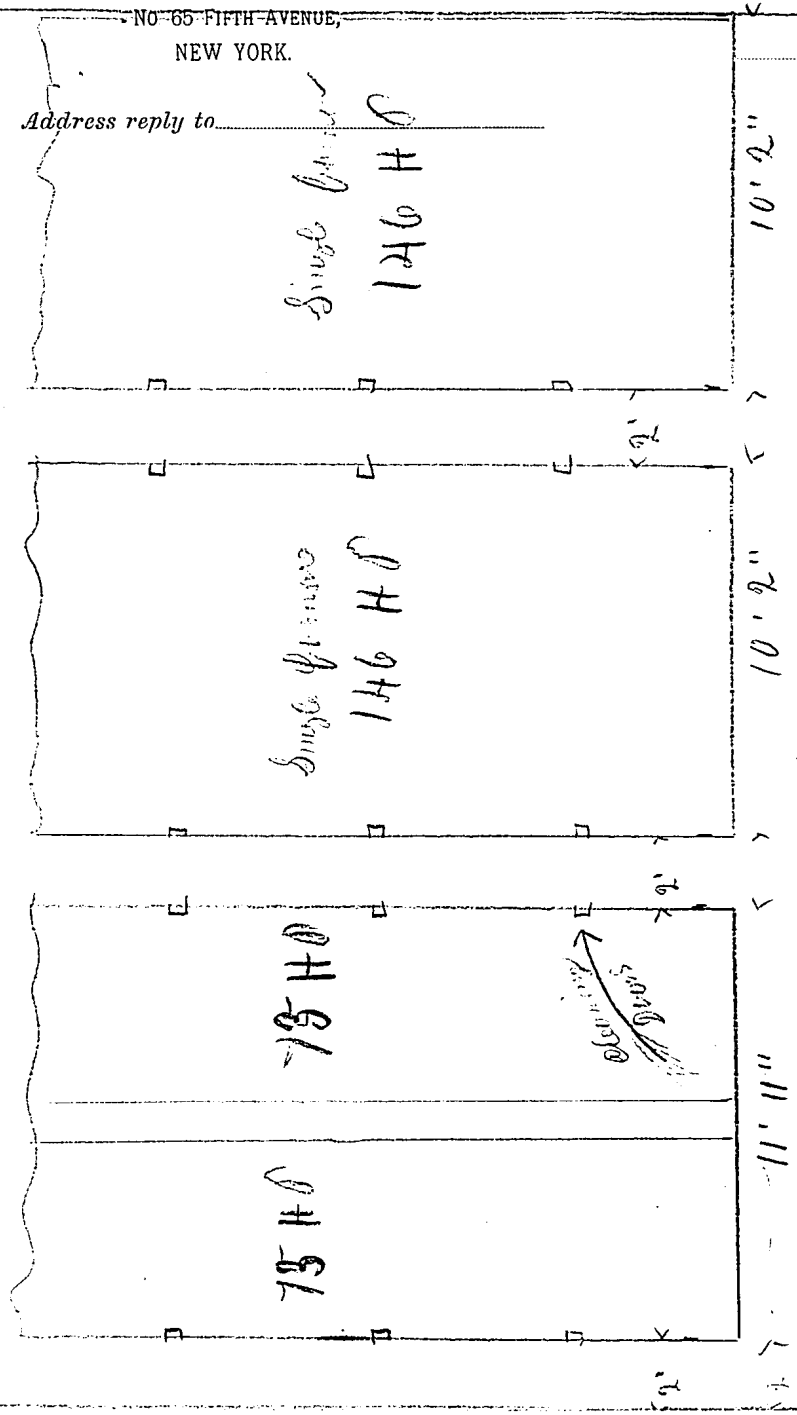
1883-10-13 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

188

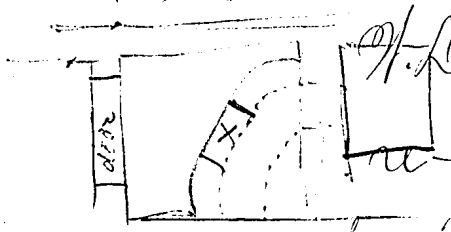
Address reply to



56

October 15 1883

Plan



W. O. Rich

Please note and his return with any suggestions you have to make

from Fall River

If Mr. Rich will build man hole door for cleaning purposes at X see above plan both boilers can be entered from this this arrangement for first pair of boilers installed. Same arrangement can be effected for other installations in this or doors can be on top of flue as shown on general prints.

No alteration need be made in Piping or Building.

C. G. Wing

Yours

RECEIVED
OCT 15 1883
ANSWERED
36
FILE No.

1883-10-15

Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Oct 15th 1883

Address reply to [illegible]

Dear Sir I would say 65 Fifth Avenue N.Y.

Dear Sir

[illegible] of the 15th [illegible] received — The [illegible] Zinc [illegible] tubes [illegible] to Hagerman & Co Tarrytown — In relation to the firebrick in boiler [illegible] to say that [illegible] we used except in the furnace from grate to Centre of Steam Drum and extending back as far as fire and on the top of tubes — beyond this point the temperature does not exceed 450 degrees. Therefore there is no use for firebrick — We have found Cylinder Oil cups for [illegible] engine [illegible] the [illegible] lubricator furnished by Hagerman & Co — but [illegible] Oil cup [illegible]

1883-10-15 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

.....188

Address reply to.....

as we need it at the place - they are bought somewhere in May — Boiler Shop Boilers and Engine foundation bolts to patterns as soon as possible - I am sorry to worry them and intend to push the job with all possible dispatch I must be setting Boilers & Engine foundation at the Sand Bank the Pipe is going up

your price of $4 15 is also at hand I have furnished a plan for Electric tube and all other goods that may be required to Prepare Dry - Just around the Street from the Station So Send along anything you Like

Very Truly yours

W. D. Rich

1883-10-25

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. Dow, *President.*
W. H. Dwelly, Jr. *Treasurer.*

Fall River, Mass. Oct. 25 1883.

T. A. Edison, Esq.
#65 Fifth Avenue,
New York.

Dear Sir:-

Refering to your favor of 24th. inst. I beg to say that we will leave it to your discretion to supply all such materials as may be required to make house connections and you may consider this an order for such supplies. It is understood however that said materials and supplies shall be charged at the usual manufacturers prices subject to discount from list.

Yours very truly,
W. H. Dwelly Jr
Treas.

OK

P 67 Oct 25/88

W. H. Dudley

re our favor of 24 inst.

1883-10-25 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Goshen Oct 25 1883

Address reply to Goshen Mass

RECEIVED
OCT 31 1883
ANSWERED
.....188..
FILE No.....

Samuel Insull Esq
65 Fifth avenue N.Y.

Dear Sir

Yours internal favor of the 24th inst. is
received also the B.O. of New Operations and Robinson's
shipping list 250 - with relation to Switch I have written
you fully on that point - two weeks ago from Scranton Mass
with relation to an Sprague letter referring to drip pipe from
Engine Exhaust. It doesnot rise after leaving the Exhaust but
has a gradual decent to where it connects with the exhaust pipe
from Dynamos which is also in my above Contract
to Instructions I will see that the change is made at the
very Today opens

W. D. Rich
Supt

1883-10-27

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
N 3	Co Cm	S Collect	156

Received at **852 BROADWAY.**

Dated Fall River Mass Oct 27 1888.

To Thos A. Edison

No 65 5th Ave

Mailed you Check for four thousand today

N. H. Dwelly Jr

Recd

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-31

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. Dow, *President.*
W. H. Dwelly, Jr. *Treasurer.*

Fall River, Mass. Oct. 31st 1883.

Thomas A. Edison, Esq.,
65 Fifth Avenue,
New York.

Dear Sir:-

I telegraphed you this morning that Mr. Knesi had ordered his men back to New York for a period of ten days and asking why we are neglected at this critical time. He came here from Brockton yesterday and I saw him for only half an hour when he took the train for Providence. During our interview he never mentioned the delay to which he intended to subject us and it was only in conversation with Mr. Rich who arrived on a later train from Brockton and learned from Mr. Knesi's men what their intentions were, that I was at all aware of their movements.

On my visit to New York last Tuesday Mr. Knesi promised me that he would order his men here as soon as their work at Brockton was completed which he stated would be on Saturday or at

latest Monday and the laying of tubes would be commenced on Tuesday. May I ask in the light of this latest movement what dependence can be placed on such statements?

Permit me to call your attention to your favor of Oct. 15th in which you state that the plant will be installed by the end of November and, respectfully inquire how you propose to accomplish it, Mr. Kruse, having admitted to the writer after looking the ground over that it will take him at least three weeks, working Sundays — which I doubt will be permitted here — to perform this part of the work.

It would seem that the importance of having our tubes completed before frost sets in, had been sufficiently enlarged upon, so that a repetition would be unnecessary, but in order that there may be no future misunderstanding I desire to get it on record and to state here, that the street commissioner has personally informed our counsel and several directors, that under no circumstances whatever, will he permit the digging of streets or removal of sidewalks, either for laying tubes or making service connections, after frost shall

1883. 10-31

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

3

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. 188

have once set in, and the supervision of the work having been delegated to him by a special order of the Board of Aldermen he will see that all proper requirements that he may impose are strictly complied with.

I have it on reliable authority — the City Marshal of Brockton — that one of their principal thoroughfares was dug up six times, to locate faulty connections in their conductors, and at Lawrence a cross in the wires necessitated digging up the street there for a second time, also.

The public are heartily sick of the continual disruption of our streets, for during the past six years they have been excavated not less than five times to accommodate city water, gas, sewers, horse-railroad and lastly paving, which was completed two months since, only to be dug over again when we commence operations.

In view of these facts we are required to file a bond of $25,000. with the City Treasurer to

save the city harmless from all costs, damages or expenses that may arise in consequence of laying our conductors.

Now, as Mr. Krueger has in spite of our protest assumed the responsibility of laying his tubes at a time, when it is an open question whether the work can be completed satisfactorily or not, our directors are of the opinion that either he or yourself should be asked to give a sufficient bond before he commences business, and further that you will see to it that none but competent men are employed in connecting and testing the tubes, so that there may not be a repetition of the troubles at Lawrence and Brockton.

Will you please let us hear from you on this matter and oblige.

Yours very truly,
Edison Electric Illuminating Co.,
by M. H. Dwelley Jr
Treas.

Oct 31/83
W. H. Dwelley
re Mr Krueger
ordering his men
away for two days

Since writing above I have met a member of the board of aldermen, who is a stockholder in our Co. and he says the Supt. of streets whom he met this noon considers that the season will be too late when we can finish laying and hopes the matter can be deferred till spring.

Oct 31 83
Will Mr Krueger
not proceed with
laying the tubes
until further
notice
Edison Electric
Illuminating Co

1883-11-08

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
398	Cu	Bm	5 Pd

Received at 852 BROADWAY.

Dated Fall River Mass Nov 8 1883.

To Thomas A Edison

65 5 ave

Coming on by boat tonight

J W H. Dwelly Jr

1883-11-12

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. Dow, *President.*
W. H. Dwelly, Jr. *Treasurer.*

Fall River, Mass. Nov. 12 1883.

Thos. A. Edison. Esq.
Dear Sir:-

As you entertained some doubts on Friday last whether the Underwriters would permit the use of the Paragon wire, I would be glad to know if a decision has yet been reached. If not, has enough progress been made to justify us in using it, rather than await a favorable decision

If we can use it please advise me by telegraph or otherwise promptly, so that no time may be lost, and we will commence work either with or without it.

I think you have to use regular wiring until they get permission

Copper is cheaper

Cut from 1 cross section

Yours very truly,
W. H. Dwelly, Jr. Treas.

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. June 1st 1883.

Thos. A. Edison Esq.
65 Fifth Avenue N.Y.

Dear Sir:-

Can you send us a first class man to take charge of our wiring? Our plan regarding the house wiring is to furnish all money, and materials necessary for the business, employing a good man to prosecute it, making contracts &c in his name as if he conducted the business independently of us. We would pay him well and install the lights at a lower figure than could be done by a man making it his business and adding a profit thereon. This will enable us to connect many customers that would otherwise abandon the light by reason of its first cost for introduction, as is the case among many in Brockton. I would thank you

to write me fully on this subject if it meets your approval and advise me when we can expect a good man.

Yours very truly

W. H. Owsley for Texas

Jan. 1, 1/58

W. H. Owsley
Requesting man
Dep. Sec. do. Thy
Army

4

1883-11-16

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
57	Cam	12 PM	95

Received at **852 BROADWAY.**

Dated Fall River Mass Nov 16 1888.

To Samuel Insull

No 65 Fifth Ave

No steam pipe yet sadly in want of it hurry it up

M. J. Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
17	Ca	h 1124	11

Received at **852 BROADWAY.**

Dated Fall River Mass Nov 16 1888.

To T. A. Edison 65 5th Ave

Need not send man we will try it with local firemen

W H Kinsella Jr

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-19

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
54	Co	H	

Received at 854 BROADWAY.

Nov 20 188

Dated Lawrence Mass

To Saml Insull 65 5th ave

Has Large Copper Wire and other Material been sent to Fall-River

M. J. Andrews

This telegram has just been received at the office in 854 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

D 1883 Edison, T. A. - Advice

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. Aug 20 1883.

Greenfield can't come

How would it do to have Mr Paine of Providence come & carry out the work & your people do it

Thos. A. Edison, Esq.
#65 Fifth Avenue
New York

Dear Sir:-

I telegraphed you this morning to know if Mr. Greenfield or Mr. Fitch would come here, bringing sufficient materials to make a start on our wiring. Our directors have been debating the subject of wiring the ~~[illegible]~~ by contract or as I write you a few days since employing a Foreman to take charge of the whole. So far they have come to no conclusion and now hack between two opinions. The importance of having something done immediately I fully realize and acting on this impression I wrote you, but at this writing have received no answer.

But for Providence cause don't let the Co have anything to do

We can put on five or more practical men who have homes here and have been employed by the Isolated Co. for a year

past. But what we most need is a man of Mr. Greenfields calibre, one who has had extended experience in house mining, to direct the work.

I trust that you will be able to furnish some one, if not Mr. Greenfield, and that tomorrows mail will bring advices regarding this matter.

Yours very truly,
H. E. Donnelly Jr Treas.

46
Nov 20/83
W. H. Donnelly
requests Mr Fitch
or Mr Greenfield
to begin work

1883-11-23

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

RECEIVED NOV 23 1883 ANSWERED

NUMBER	SENT BY	REC'D BY	CHECK
399	X1	W	Nov 23 1883

FILE No. Nov 23 1883.

Received at 852 BROADWAY.

Dated Lawrence Mass 23

To Saml Insull 65 5th Ave

What is the size of engine room at fall River station answer & I will return exact length of half inch Copper rod wanted also number of Johnson Connections W S Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

RECEIVED NOV 24 1883 ANSWERED

NUMBER	SENT BY	REC'D BY	CHECK
135	Cah	WB	Nov 24 1883 1056

FILE No. Nov 24 1883.

Received at 852 BROADWAY.

Dated Lawrence Mass 24

To Saml Insull 65 fifth ave

Please answer telegram sent yesterday afternoon about size of Fall River Station

W S Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-24

Lawrence Mass.
Nov 24th 1883

Samuel Insull Esq
c New York

Dear Sir

Your second telegram about size of Fall River station to hand. Your first telegram sent last evening was not delivered. Your telegram reads "Bottle room forty by forty" I wired to you for size of engine room, and presume that this is meant. Owing to disposition of dynamos, and place where feeders are brought in, I shall have to carry the commutator wires all around three sides of the room and this is why I shall require so much office. Perhaps when I get on the spot I may see some way to do with less, anyways you may rely upon it that I shall always economise as much as possible — I shall not want any Johnson connections in this job as I shall butt the rods together, slip a

1883-11-24

copper sleeve over joint and solder together
In reference to Mr Sprague's plan of connecting resistance boxes for regular and spare dynamos, I think he has not sufficiently considered the subject or he would see that one regulator for each dynamo is enough, if they are coupled up like my sketch enclosed. I should be happy to hear his criticism on this plan.

It will make no difference whether the current runs right through regulator box as he states or whether it runs across from one end to the other by local circuit. Mr Sprague states that the boxes for his 200 lights have the same regulating value for lights as those of the 1x in reserve all right. I called upon attention to this fact two or three weeks ago, and mentioned it to Mr Bradley on the subject

I have only just time to catch this mail so must defer other points for another letter — Very truly Yours

H. S. Andrews

Please address me Taunton at Fall River

1883-11-24

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. Nov. 24 1883.

Thos. A. Edison. Esq.
65 Fifth Ave.
New York.

Dear Sir:-

As you are aware, our station is rapidly approaching completion, the engines are in position also the large dynamos, but the small pair of dynamos has not yet arrived. We are somewhat interested to know if these will be in readiness for starting the station. It would be a great waste of power to be compelled to run the large engine and dynamos for 100 lights or so, and it is improbable that we can start more than that number by Dec. 10th.

Perhaps you will advise us in regard to this matter.

The Gas Co. have reduced rates 20% or from 2.50 to $2. pr. m. feet.

Yours very truly, W. H. Dwelly. Jr. Treas.

1883.11.26.

THE EDISON ELECTRIC ILLUMINATING COMPANY.

ROOM 29, BORDEN BLOCK.

A. F. DOW, *President.*
W. H. DWELLY, JR. *Treasurer.*

Fall River, Mass. Nov. 26 1883.

Thomas A. Edison Esq.
65 Fifth Ave.
New York

Dear Sir:—

We enclose herewith check to your order for $8500. (eight thousand five hundred dollars) on a/c. of payment toward construction contract.

Please sign and return enclosed receipt.

Yours very truly
W. H. Dwelly Jr
Treas.

1883-11-26

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
152	Cu	Cm	16 Pd	1046

Received at **852 BROADWAY.** Nov. 26 1888.

Dated Fall River Mass

To Samuel Insull

65 5th Ave

No wire rope here want to raise stack tomorrow send it on tonight boat pure answer

W D Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-27

Form No. 41.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
72 fr		Lu	11 Paid mte	

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Nov 27 1888.

Dated Fall River Mass 27

To Samuel Insull 65 fifth ave

N Y

Have arranged for unloading machinery Has wire rope been sent

answer

W D Rich

1883-12-03

East River
Dec 8 1883

Samuel Insull Esq.
66 Fifth Ave

Dear Sir

Enclosed please find expense sheet to date. I wish to report that the work here is going on nicely and unless we have to wait for fixtures the electrical part of the station will surely be ready to start at the end of the week. I find that much time is saved in the

1883-12-03

use of the strait
length of copper
We get along much
faster and the work
looks much better.
Will you kindly send
Mr. Bence "Construction
Dept" paper & envelope
and also two of the
wire tables as published
by the Electric Light Co.

Yours very Truly
P. Van Doubleday

P.O. Box 565

Ar

1883-12-05

Fall River
Dec 5th 83

Samuel Insull Esq.
Dear Sir

The work here has gone forward as far as possible until the materials ordered for this plant is received; if the order is not complete can not we have part of the same at once. The piping and boilers are ready though Armington & Sims man has not yet arrived. The 300 light dynamos I am told are on the dock and will be placed

Yours Very Truly
H M Southwick

1883-12-05

1883-12-08

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Fall River ~~New York~~, Dec 8th 1883

Saml Insull Esq.

Dear Sir

Your favor enclosing Wire table is at hand also package of paper for which please accept thanks. Will you kindly send check for amount of expense and pay accounts up to the 1st of this month. Have received notice of shipment of some material from Bergmann the goods will probably be here Monday. I understand that the local Company have word for some 300 lamps, and are pushing the work though very few sockets are placed as yet.

Yours Very Truly H. M. Dowidney

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,
~~New York~~, Fall River Mass Dec 9th 1883.

Thos. A. Edison Constn Dept
New York

Dear Sir

There has been a mistake made in the rails sent with the Tube Y Dynamos to this place they are of different lengths, the longest being 3 ft 10½ inches which allows but about 4 inches travel for stretching of belt. There are some rails of this length out of those used with the two Machines but there are very little longer than width of dynamo bed, so that they will not permit of any travel for the armature belts. I think that ends of these rails should be made long.

Our driving wheel of second Dynamo is 8 inches but this is only 7 inches, yet both belts are made to stand well and I will look out for a 7 inch driving wheel.

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

[illegible] these belts were sent here [illegible] too long, and will have [illegible] that much here — [illegible] "Y" Dynamos have [illegible] cast on them for [illegible] of the middle screw — [illegible] have three flats on each [illegible] bed. This is how it [illegible]

[illegible] I ask if it is proper to [illegible] of these lightening [illegible] one side of dynamo [illegible] lightening up the belt [illegible] that the middle one [illegible] opposite side, and [illegible] belt when [illegible] necessary, to take it [illegible] that all three are [illegible] in every case. [illegible] the dynamos [illegible] the middle [illegible] the [illegible]

[illegible] seen no [illegible]

3 1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

Station have as yet, but I hear that they will try to get it up tomorrow [illegible] complain of having to [illegible] immediately in a new [illegible] building, with no heat — [illegible] of the year

[illegible] is at present so damp that [illegible] one of the "Y" Dynamos that is current will fairly dripping [illegible] It will have to be dried out [illegible] days before it can [illegible] with safety

[illegible] arrangement was made for [illegible] In order to get the [illegible] portion of the [illegible] been cut away [illegible] the commutator [illegible] is placed. This will [illegible] of further [illegible]

Yours very truly
[illegible]

1883-12-13.

New-York, Dec. 13th, 1883.

Mr. C. H. Cambell,

Here is a letter from Mr. Andrews, in which he complaines that the belts for driving the Dynamos in Fall River are too long. Is it an impossibility to calculate the exact sizes of belts? from the "success" which we met in this matter it appears to me, that either these lengths can only be obtained by actual measurment, or somebody needs to spend a few evenings each week, reading up Trautwine. We have never yet supplied a belt but what it has had to be respliced.

Let me have this letter back as quickly as possible.

A. O. tate,

per. B.

Attached.

[ENCLOSURE]

1883-12-11 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,
~~New York~~, Pearl Street
Dec 11th 188 3

Chas. C. Edison Constn Dept
New York

Dear Sirs —

The belts sent for driving the Lee "Y" Dynamos are both 27 feet long. I think it is a great waste to have to cut 2 feet out of them, besides the impossibility of making a neat good joint here —

Would it not be better to use these belts entirely for some other station, and order two others for use here? —

Please inform me what you wish done in this matter. The belts should be 25 ft.

Very truly Yours.
W. S. Andrews —

(a)

1883-12-13

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
318	rg	X	31 paid

Received at 852 BROADWAY. Dec 13 1888.

Dated Fall River Mass 13

To Thos A Edison

65 — 5 Av

Small Engine here is Eight and a half by ten forty inch driver should it not be a nine and a half by twelve for two three hundred

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-13

orm No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
			2

Received at 852 BROADWAY. Dec 13 1888.

Dated

To

Light machines answer

W D Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-12-14

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
339	gsk	HPG	1/29

Received at 852 BROADWAY.

Dated Fall River Mass Dec 14 1883.

To Thos A Edison

65 5 am

Will move dynamos back

W. H. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-15

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
607	CW	Ley	2 PM	

Received at 852 BROADWAY.

Dec 15 1883.

Dated Fall River Mass 15

To Thos A Edison

65 5 Ave

Governor Pulley

W S Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

[ON BACK OF PRECEDING PAGE]

Pulley should be altered but will stand it if made 6½" with but a sudden load weight strain it so much as to make it unsafe

Crawford

1883-12-15

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS.
CHIEF ELECTRICAL ENGINEER,

New York Dec 15th 1883

Address reply to

Thos. A. Edison Const. Dept
New York

Dear Sir

I have just telegraphed to you that the Edison can be started one day after the regulators. Expect to put steam on the engine this afternoon, and consider it safe, but can hardly call this a trial.

Your favor of the 13th and 14th have been read & hear that you think I am unfair in my regard to new indicator — I may be — and can assure you that I shall spare no pains to make it successful — I honestly think, however, as I stated in former letter, that it is too fine and complicated an inst. for the use of the ordinary engineer.

I have received the full number of the regulators for this station, but from some of the suspending wires are broken. I have written to Mr. Ch. for some of the broken by mail & find it will cause no delay in receiving.

The insulated [illegible] specimen [illegible]

1883-12-15

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

..... 188

Address reply to.....

In the matter of Engine Speed referred to in your note of the 12th inst. I did not make experiments of my own — Armington & Sims came here to adjust valves of engine & I incidentally asked him, if the small engine would stand a speed of 300 and he thought not — however I am glad to have your opinion as his judgment is reasonable to suppose that it would be more like that our well tried engine would stand than the large one at Pearl St. in New York —

Are you going to send any oil from Pittsburg for use in the station here, or must we rely from local dealers? —

The engines have been cleaned up and are now filling both run nicely, —

Very truly yours

W. S. Andrews

1883-12-15

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
69	Co	a	15 paid	936

Received at 852 BROADWAY. Dec 15 1883.

Dated Fall River Mass 15

To Thos A. Edison

65 5 Ave

Dynamo Regulators not to hand
Yet Can Start Station one
day after receipt of same
M. L. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-17

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
47	Co	h	PPd	220

Received at 852 BROADWAY. Dec 17 1883.

Dated Fall River Mass 17

To Thos A Edison 65 5 Ave

You can leave my for Fall River
tuesday night
M. L. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-20

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Dec. 20th, 1883

John Ott, Esq.

292 Ave. B. City

Dear Sir:-

Mr. Edison telegraphs, from Fall River, requesting me to have you send, the ~~vault~~ volt Indicator Box by express to Fall River to day without fail. Please be kind enough to see to this at once?

Very Truly Yours,

A. Ott

Sent to Vogel & Gack
Dec 17, [illegible] 18

1883-12-26

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Fall River ~~New York~~, Dec 26th 1883

Thos. A. Edison
Central Co

Dear Sir

Enclosed please find expense sheet to date Will you kindly send on my Salary and Expense account to date. I send by express to Morrow the extra ampere meter to Bergmann & Co. I have received to day 14 each 6 & 12 light meters and three 50 light, I telegraphed for Mercury this a.m and bought two lbs here so that there shall be no delay in getting out the meters. The swinging Brass bracket received has been claimed by Mr Tuttle as having been sent on his

1883-12-26

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

order for another Place, and as I had no means of proving that it was meant for the station I did not claim it - no mark specifying who, the goods, packed with Mr E's material, belonged to could be found. We are waiting for a N. P. desk clip in stead of the bracket as Mr Andrews has no doubt spoken of when in New York. Yesterday as the load was light I ran the 8x10 engine at 360 R.P.M. and it ran beautifully. We have 270 lamps in circuit, the indicators are also running well 4 of them are in position.

Yours Truly
H. W. Doubleday

[illegible]

1883-12-29

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

~~New York,~~ Fall River Dec 29th 1883.

Thos. A. Edison
Constn Dept.

Dear Sir

Your letter of the 24th inst is at hand. I have delayed writing in order to get a decided answer from Mr Fitch in regard to the date of his finishing here - He tells me this P.M that he will be in New York either Monday or Wednesday and will see you then - In reporting the receipt of 21-25 light meters there was an error of one the number received was 20-25 lights I wish to ask if the extra crank.

1883-12-29

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Pin boxes and extra babbit sleeves for the dynamo bearings mentioned in the ~~Contract~~ estimate are to be furnished, if so it seems advisable to have them on hand, and in regard to the stationary for the office; Lamp & Miller ~~accts~~ account books should that not be forwarded to Fall River?

Every thing is working in the best shape and light giving good satisfaction

Enclosed please find receipted invoice

Yours Very Truly

N. M. Doubleday

1883-12-31

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Fall River ~~New York~~, Dec 31st 1883

Thos. A. Edison
Construction Dept.

Dear Sir

I have received to day from Mess Bergmann & Co 8 double plug switches which are not at all what is wanted for the purpose for which they were ordered Mr Andrews said that he would order switches for me simple single plug switches for the regulators connections and as he understood exactly what they were for I cant believe that those sent where what he ordered. The switches are to be put onto the switch board of the dynamos and such switches as were sent are entirely unsuitable

1883-12-31

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

so I return them to day.
Received to day extra boxes
for crank pin of both engines.
During a rapid storm Saturday
evening the smoke stack jumped
from the cast iron seat and
stood at an uncomfortable angle
until I could have it righted
on examination I found that
the flange of the seat was only
5/8" high this seems very small
for the large stack we have over
our heads. Please hurry on check.

Yours. Very Truly
N. M. Dowlday

1883-72 No. 1

Fall River Dec 1883

T. A. Edison Esq.

To Thos. F. Stack Dr.

1883			
Oct. 19	1-½ Tapping Plates		15.00
	50 ft 3/4" Nipples		8.50
	1 Nipple Hopper		1.00
	45 ft ½" Galv. Pipe	6.30	
	1-3/4" Bushings	.08	
	4-½" Galv. Ells	.32	
	2-½" " Nipples	.12	
	1-½" T.H. Stop Cocks		1.00
	1-½" Cocks N. Tibb		1.00
	2½ Hours Plumber & Helper		1.00
23	4 3/12 ft ½" Galv. Pipe	.64	
	1-½" " Coupling	.10	
	1½ Hours Plumber & Helper		.75
25	51½ ft 2" Galv. Pipe	32.96	
26	5 ft 2" " "	3.20	
	51 ft 1½" Clain "	16.83	
	5 ft 3/4" " "	.68	
	2-3/4" Conductors	.10	
	2-4" Earthen Tees		.90
	1-4" " Bend		.39
	2 Hours Plumber		.70
Nov. 5	16 lbs Lead Pipe		1.28
	2½ Hours Plumber		.70
6	24-3/4" Ells	1.20	
	6-3/4" Couplings	.36	
	2 lbs Solder		.44
	3 Hours Tinner		1.05
10	31 ft 2 ft 1¼" Pipe	8.48	
	19 ft 2 ft 2" "	9.16	
	3-2" Tees	1.80	
	1-2" Ell	.50	
	3-1¼" "	.69	
	2-2" Bushings	.54	
	1-1½"	.18	
12	2-2" Nipples	.50	
	32 ft 4" Galv. Conductors		5.76
	2 lbs Solder		.44
	Charcoal		.10
	6-4" Hooks		.48
	1 lb. Copper Wire		.50
	5 Hours Tinner		1.75
14	3-2" Ells	1.50	
	2-2" Nipples	1.60	
	3-2" Nipples	.75	
17	12-1¼" Ells	.48	
	12-1¼" Nipples	.60	
19	6-3/4" Couplings	.36	
26	16 lbs Galv. Iron		2.24
	4 Hours Tinner		1.40
		90.09	46.38

	Amt brot forward	90 09	46 38
27	1/2 lb. Solder		11
	4 Nozzles Funnel		1 40
	636 lbs Sheet Lead		57 24
28	1-1½ X 1¼ Ell	29	
	1-1¼" "	23	
	1-1¼" Nipple	14	
	1-1¼" C. I. Bowl		1 50
	10 Nozzles Plumber & Nipple		5 00
30	2-¾" Globe Valves	2 40	
	6-¾" Tees	24	
	6-¾" Ells	54	
	2-1¼ X ½ Tees	29	
	3-¾" Unions	90	
	1-½" "	22	
	25 lbs Solder		5 50
	5-½" Globe Valves	4 75	
	2-¼" "	1 20	
	1-¾ X ½" Tee	15	
	1-¾ X ½" Ell	10	
	71½ ft ¾" Pipe	5 72	
	Cutting and threading 2½" Pipe		1 50
	41½ ft 2½" Pipe	3 38	
	34 ft ¾" "	4 59	
	1-6" Bushing	14	
	171 ft 1" Pipe	32 49	
	1-¾" Plug	06	
	1-¾" Nipple	09	
	16-1" "	1 60	
	10-1" Unions	3 60	
	6-2" Plugs	1 08	
	Labor drilling and tapping Plugs		25
	2-2" Bushings	54	
	6-½" Ells	36	
	12-¼" "	48	
	19½ ft 1¼" Pipe	5 17	
	3-1¼" Ells	69	
	1-1¼" Union	48	
	1-½" Plug	05	
	10 Nozzles Steam Fitter		3 00
	10 " Plumber Nipple		5 00
Dec. 1	2-1¼" Nipples	28	
	20 lbs Solder		4 40
	4 Sheets Tin		40
	2 lbs Solder		44
	7 Nozzles Funnel		21 45
	51 ft ½" Pipe	5 61	
	6-½" Ells	36	
	3-½" Tees	24	
	1 Paper Round Stove Knobs		45
	1 Bbl. Charcoal		60
	1-1¼" Brass Lockwood Nipple	90	
	2-1¼" Lockwoods	20	
		169 83	385 12

	Amt brot forward	169 83	385 12
	7 Nozzles Plumber & Nipple		3 00
	10 " Steam Fitter		3 00
3	8 ft 4" Drain Pipe		96
	1-4" Ell		45
	1-4" Half S. Lead Trap		2 50
	5 Nozzles Sewer Man		1 00
	2-½" Unions	44	
	1-¼" "	15	
	5-1" "	1 20	
	1-½" Nipple	07	
	1-¼" "	05	
	2-1" "	20	
	1-1" Bushing	11	
	2-¼" Tees	10	
	15 Nozzles Steam Fitter		3 00
4	2-½" Ells	12	
	2-¼" Unions	30	
	3-¼" Nipples	15	
	2-½" "	14	
	1-¼" Tee	05	
	41½ ft ½" Pipe	4 04	
	10 Nozzles Steam Fitter		3 00
	10 " Sewer Man		1 00
5	1-½" Union	20	
	3-½" Tees	24	
	3-½" Plugs	15	
	3-¼" Nipples	15	
	2-½" "	14	
	11 ft ½" Pipe	1 21	
	1-¾" Union	30	
	15 ft 2" Galv. Pipe	9 60	
	1-2" " Ell	72	
	1-2" Trap	30	
	1-¾" Ell	09	
	Labor cutting & drilling 2" Galv. Pipe		25
	3 lbs Galv. Solder		42
	10 Nozzles Steam Fitter		3 00
6	3 lbs Galv. Solder		42
	4 Nozzles Funnel		1 40
	1-¾ C. I. Ell	09	
7	1 Gas Vent Hopper		21 25
	1 Closet Bowl		1 50
	1 Hopper Lock		1 35
	5 lbs Lead Pipe		40
	1-½" Comp. V. Bibb		1 50
	1 Filler		30
	3-½" Soldering Nipple		75
	4 lbs Putty		20
	1 H.C. Safety Chain & Snap		36
	1 H.C. Basin Plug		60
	1 H.C. Basin Cock		1 50
	3 Nozzles Plumber & Nipple		1 50
		191 26	470 73

	Amt brot forward	191 26	170 73	
8	12 1/2 ft 1/4" Pipe	1 80		
	16 1/4" Ells	64		
	2 1/4" Nipples	10		
	2 1/2" Ells	16		
	6 1/4" Couplings	30		
	Cutting		35	
	1 1/2" Couplings	07		
	1 Scotch Glass & Packings		35	
	1 Metal Washer		05	
	1 N.C. Steam Stay		40	
	1 Nonus Plumber & Helper		5 00	
18	10 ft 3/4 Galv. Waste Pipe		1 20	
	1 1/4 Solder		32	
	1/2 lb. Galv. Iron		07	
	4 Scotch Glasses & Packings		1 40	
	3 Nonus Tinner		1 05	
11	1-2 1/2 Wrot Iron Radiator		10 08	
	2-1/2" Globe Valves	1 91		
	4-1/2" Nipples	20		
	3-1/2" Ells	24		
	4-1/2" Ells	24		
	2-1/2" Unions	44		
	60 ft 1/2" Pipe	6 60		
	2-1/2" Bushings	54		
	2-3/4" "	16		
	2-1/4" Cut Locks	1 34		
	5 Nonus Steam Fitter		1 50	
12	3-1/2 R.H. Couplings	18		
	1-1" Bushing	11		
	1-1 1/4" "	15		
	4-1" Ells	60		
	4-1" R.H. Couplings	60		
	8 ft 1" Pipe	1 50		
	2 3/4" Nipples	18		
	2-3/4" N.P. N.H. & L. Valves			
	2-3/4" Door Bushings		30	
	10 2 Nonus Steam Fitter		8 00	
13	3-1/2" R.H. Couplings	18		
	Rubber		25	
	5-1/2" Ells	30		
	1-1/2" Tee	08		
	2-3/4" Nipples	18		
	1-1 1/4" "	14		
	1-3/4" Ell	09		
	1-3/4 x 1/2" Coupling	10		
	1-1 1/4" Bushing	15		
	11 1 Nonus Steam Fitter		3 00	
14	4-1" R.H. Couplings	60		
	1-1 1/4" Nipples	14		
	1-1" Globe Valve	95		
	3 1/2 ft 1" Pipe	65		
	1-1" N.C. Air Valve		50	
		21 201	199 45	

	Amt brot over	212 21	199 45	
	10 7 Nonus Steam Fitter		3 00	
15	4-1" Ells	64		
	1 3/8 ft 1" Pipe	24		
	6 ft 1/2" "	66		
	1 1/2" R.H. Coupling	16		
	10 Nonus Steam Fitter Help		5 00	
18	1-3/4" Tee	12		
	1-3/4" Ell	09		
	1-1/2 x 3/4" "	16		
	1-3/4" Bushing	16		
	1-1/2" "	07		
	8 ft 3/4" Pipe	1 08		
19	2 1/2 Sheets Tin		2 00	
	2 lbs Solder		44	
	3 " Nipe		45	
	1 Lot Putt		75	
	Refining Oil Lamp		25	
	1 1/2 Nonus Tinner		5 95	
20	1-1/2 Brass Bushing	08		
21	2-1/4" " Nipples	30		
	2-1/4" " Couplings	20		
	1-1/4" " Ell	12		
3 hrs	5 Nonus Steam Fitter		1 75	
24	1 " Tinsmen		3 00	
25	20		6 00	
26	50 ft 3/4" Steam Pipe		4 80	
	2 3/8" Bends		60	
	1-3/8" Tee		37	
10 x 1	8 Nonus Two Men		5 40	
	10 " Seven Men		2 00	
27	1 Door Draw		35	
	1-3/4" Nipples	09		
	5-1/2" " Long	30		
	6-1/4" "	30		
	3-1/8" "	15		
	2-1/2" Ells	13		
	12-1/4" "	48		
	1-1/2" Cond. & Gibbs		1 10	
	1-3/4 x 4" Flange	20		
	1 1/2 ft 1/8" Pipe	14		
1 x	12 ft 1/2" "	1 32		
1 x	1 ft 1/4" "	1 20		
	1 1/8" Cap	03		
	2 Lag Screws		10	
	1 Bank Weight		15	
	2-1/4" Cooper Union	3 60		
	7-1/4" Couplings	30		
	8 Rides Organ Nuts & Screws		1 20	
	8-3/4 Washers & Screws		09	
x	5 Nonus Steam Fitter		1 50	
x	5 " Helper		1 00	
28	10 lbs Lead Pipe		80	
		224 23	224 00	

Setting for fire place and replacing unfinished fitting in the fire place

Labor for fitting fire place

Drawing to water fitting fire place

No. 2

1883-12-60

	Ant Iron Pan	224	22	248 00
	1 lb. Solder			22
	1-1½" Brass Trap			2 00
	8 Hours Plumber & Helper			4 00
	1-½" Nipples		04	
×	1½ Hours Fitter & Helper			75
31	1 Water Closet Bowl			1 50
	2 lbs Putty			10
Jan. 1st	2½ Hours Plumber			88
	6 " Sewer Man			1 20
2	1-4" Bottom Y			2 45
	2 ft-4" Drain Pipe			34
	1-4" Trap			15
	1 Plug			15
	1½ Hours Sewer Man			2 00
	2½ " Plumber & Helper			1 25
3	1-1" Coupling		13	
	1-1" Globe Valve		1 70	
	1-1" Plug		08	
	1 Hour Fitter on Overtime			85
5	1 lb Lead			17
8	2-3/4" Nipples		18	
	1-3/4" Right & Left Coupling		10	
	1-3/4" Ell		12	
	2-3/4" Nipples & Screws			06
	1-3/4" Globe Valve		1 30	
	9 Hours Steam Fitter			8 15
15	3-3/8" Ells		15	
	3-3/8" Brass Unions		1 50	
	1-3/4" Tees		17	
	1-3/4" Crosses		08	
	2-3/4" Globe Valves		1 50	
	6-3/4" Nipples		36	
	1-1" "		07	
	5 ft-3/4" Pipe		45	
	1½ Hours Fitter & Helper			9 00
17	20 lbs Black Iron			1 60
	9 " Lead			99
	5 " Wire			75
	5 " Solder			1 10
	4 Belts			04
	Blacksmith's Work			35
	1 H.C. Pot Hook			50
	2½ Hours Tinner			7 70
23	2-1 Belts			04
	1-1¼ X 1" Ell		24	
	2-1¼" "		52	
	1-1 X 3/4" "		19	
	1-1" Nipples "		10	
	1-1¼" " "		14	
×	1 Safe ×			50
	12 Hours Steam Fitter & Helper			6 00
×	1 " Tinner			35
			2 33 36	59 61 4

Water Closet Bowl

Cleaning Sewer

Necessary Articles in Steam Connection to furnish & install

Putting traps down & connecting up Sewer

Credit

Dec. 18	8-1" Unions		2 48	
	2-½" "		44	
	1-¼" "		15	
	2-¼" Globe Valves		1 20	
	2-1" Nipples		20	
	3-½" "		21	
	1-3/4" Tee		12	
	3-1" Right & Left Couplings		45	
	2-½" " "		12	
	2-3" Plugs		36	
	1-3/4" Ell		09	
	2-½" "		12	
	1-¼" "		04	
	1-¼" Tee		05	
	32 ft-¼" Pipe		2 56	
	8 ft-3/4" "		72	
	4 ft-½" "		44	
	6 ft-3/4" "		81	
27	16 ft-5" Drain Pipe			96
	1-5" Bend			50
Jan. 8	1-1" Valve		1 70	
			12 26	
	Less 40%		4 90	1 26
				7 36
				8 62
	4 ft-2½" Pipe		3 00	
	2 ft-3" "		1 90	
	1-3" Nipples		75	
	1-2½" "		56	
	5-1¼" "		70	
	4-3/4" "		36	
	1-3" Ell		60	
	1-3 X 2½ "		1 12	
	1-1½ X 1¼ "		27	
	2-3/4" "		18	
	2-1" Plugs		16	
	1-1" Coupling		13	
	2-1¼" Brass Unions		3 60	
	1-3/4" " "		90	
			14 23	
	Less 40%		5 69	
			8 54	

No. 7

	Amt brot Over	233.36 2962.14
Jan. 31	20 ft 1" Pipe	8.80
	1 1" Union	.85
	2½ Nipples Fitting & Hydrants	1.20
Feby. 4	1-1¼ swinging Check Valve	3.25
	5 Nipples & Plain Hydrants	2.50
		237.52 3030.14
	Less 4.00	95.00
		142.52
		4445.66
	Tools returned	7.62
		4437.04
Feby. 6	" " " "	8.54
		4428.50
	15% Extra Discount ~~$237.52~~	35.63
		$4392.87
	15% advance on Goods Returned	2.38
		$4395.25

Pd. Oct. 1

Wilkes - Fall River -
(1853)

Block 18. Pocasset Street -

1) How long does gas burn every night in Attorney ?

2) How long does arc light at Post - office burn -

3) Give particulars of gas Engine - Block 14 Block. Main Street -

4) Sheets 139 + 140 missing, giving courses of N. Main + Granite Streets of Block 21.

H. Turner

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Massachusetts - Lawrence (D-83-048)

This folder contains correspondence, reports, and other documents relating to the construction and operation of the Lawrence central station, which opened on October 20, 1883. Much of the correspondence is by Edison employees William S. Andrews, W. D. Rich, and H. Ward Leonard; and by officers of the Edison Electric Illuminating Company of Lawrence, including F. E. Clarke, president, and E. H. Lord, treasurer. Some of the documents by Andrews are partially illegible due to water damage. Some of Rich's correspondence may be difficult to read because of smeared ink.

Approximately 90 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence regarding orders and employee expenses.

1883-05-25

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

RECD. MAY 25 1883 34

ANSWERED

May 25/ 1883

FILE No.

Lawrence, Mass. May. 24th 1883

Thomas A. Edison Esq

— Dear Sir. —

Our company has decided to put in the Street mains feeders &c — in accordance with your letter of April 28th to them excepting that they will omit the mains below Jackson Street. The No 6 feeder will be put in to enable us to go up Jackson Street or further on Cross St as we may hereafter determine. — We understand the cost of this to be $9733.33 — completed and ready for attaching service box joint & short tubes which are to be furnished and put in at 1.35 each, as we may determine

1883-05-25

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

No 2

T. A. E. —

Lawrence, Mass. May 2d 1883

The matter of Engines, dynamos and requisite boiler power will be determined within a few days when we shall be ready to complete the order or contract. — But in order that you may understand our decision to go on at once you may consider this an order to go ahead with the underground mains feeders, punctiliously & a completely of our understanding is correct as above. —

Yours truly P. S. Clark Pres't

1883-05-28 36

OFFICE OF

The Edison Electric Illuminating Co.

RECEIVED
MAY 29 1883
ANSWERED
May 29/1883

OF LAWRENCE.

Lawrence, Mass. May 28 1883

FILE No.

Thos. A. Edison Esq

Dear Sir

Your of 25 at hand — our sheets are fored with square granite blocks — I think you are in error as to the matter of excavation filling &c needing to be added to my figures. — You will see that I added the cost of #6 feeder to the cost of the price given without it. — Now as the No 6 feeder will go in same ditch as the other feeders & mains — would there be any additional charge for excavation &c? — It seems to me not. — In regard to payment of m do not decide to

1883-05-28

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

T.A.E.

Lawrence, Mass. May 28 1883

give you the full contract for the plant, we will at any time remit 25% of such a part of it as may be concluded. —

Yours, H. B. Clark Pres.

1

1883-06-14

Lawrence, 14 June 1883.

Thomas A. Edison Esq

Dear Sir

I have received your estimates of installation of Central Station - with Order #1. - and as they are not exactly what we want, I return them for revision. — Taking first Order No 1. - against articles which I think ought to be changed. I have marked letters in red against the items referred to below.

(a) We have the Stone and foundation already set for the engine - which will only need removing - as we shall set 14½x18 engine first - The Stone and most of the bricks can be used - so that the cost of that foundation should be considerably less than half of the 14½x18. -

(b) Why 24 brushes which is all you give for whole plant of 4 dynamos? — Should it not be 12 - 6 for each dynamo as we shall want them eventually

(c) — Unpacking of 4 machines in Exhibit B you give as $64 - Should not the unpacking of 2 machines be $32 instead of $48. -

(d) — You misunderstood my order. What we want is the 61 hp boiler put in on order #1. - the engine & dynamo now in are placed where the 146 hp boiler will be placed when put in - to save a break in giving our light already contracted for & running - we must put in the 61 hp - and start the 14½x18 engine first

2

1883-06-14

d Continued } then the 8½x10 & 8 dynamo can be removed after the other is going — thus no break in light. — the 2-61 hp pony boilers are now in, and one to be put in beside it will give power enough — for if the demand comes for more lights we shall put in the 146 hp and complete the station in time to supply all lights wanted — hence this item shd be — 1-61 hp boiler $1337. —

(e) — Setting 61 hp boiler will not be as much as the 146 — as the frame is all in and most of the foundation — only the outside stones or brick to be put in. —

(f) — Steam pump may be left out as we have one here. —

(g) — floor is already paved with brick which will make sufficient hearth in front of boiler. —

(h) — We have already in our Station a bench, bits files &c. — and do not need any

(i) — If the 61 hp boiler is put in instead of the 146 — the steam connections will be much simpler and cost proportionally less. —

k. — We dont understand what this item means please explain. —

1883-06-14

In Exhibit B— estimate for the entire addition to our present plant. let the items ordered to be "left out" in order No 1— also be left out — and then that will be right.—

When you get the result of the last of the Jarvis setting please inform me of the result that I may determine whether to have it added to our boiler setting.—

Will it not be well to insert in the Contract that if before we add the completion of plant any change in price is made in prices of Dynamos or Engines we shall have the benefit of such change.—

I return the memorandum agreements as by leaving out the items suggested the total amounts will be changed.—

As soon as these are righted we will sign and forward check for 25%.—

Yours R. G. Clarke Pres.

1883-06-16

June 16th. 1883

F. E. Clarke, Esq. Prest.

Edison Electric Illuminating Co.

Lawrence, Mass.

Dear Sir:-

I am in receipt of your favor of the 14th. inst, with enclosures named. I return you herewith contract signed in duplicate, and also revised "Exhibit B" and order No. 1 which I think will now meet with your approval. With relation to the steam piping, it is impossible to reduce this any great amount, as the whole steam piping is arranged in order to enable the completion of the plant without materially increasing the cost to you. In fact the only steam connection that will be made when the second order is given is that to the 140 horse power boiler, and the connection of the second 14 1/2 x 18 on to the steam piping already up. With relation to the temporary fixtures, these are little attachments which are put on the gas fixtures at present in use by the consumers. We have found it necessary to use these in the First District here, as consumers very naturally object to having their gas fixtures altered over to electrolieis until they are satisfied in their own minds that our light is going to be permanent.

permanent. I have made an addition to the agreement which will cover the point that you raise with reference to a probable change in the cost of dynamos and engines, it however, strikes both ways, if the prices are increased, I expect to have the benefit, if prices decrease, I give you the benefit, this you will see is quite fair.

Yours very truly,

1883-06-20

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. June 20. 1883

T. A. Edison Esq

Dear Sir Yours with amended exhibit for our addition received The contract will be consummated in a day or two and the 25% cent. as an assessment has already been laid for that purpose I write you this that you may proceed at once — Have you copies of the Exhibit B — and of order No. 1 — 2 If so will retain these here for reference. —

Yours P. C. Clarke Sec

1883-07-09

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. July 1883.

Thomas A. Edison, Esq.

Dear Sir,

We shall run our central station all the time but from midnight till 4 P.M. one dynamo will give us sufficient current for lights and a few motors already engaged. Can our old K be altered to give a 220 volt current to do this work and to work with the other 2 machines which will be in series of course?

Are your motors ready for delivery? Have orders for 1 one h.p. and 1½ h.p.

Very truly yours,

E. N. Lord, Treas.

1883-07-10

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. July 10 1883.

Thomas A. Edison, Esq.

Dear Sir:

The addition to our central station building will be completed by Sat. July 21. We have permission by a city ordinance to lay the cables and everything will be in readiness for you by the above date.

If perfectly convenient for you I should like to have the balance sent to me before you send the other goods as I have no meter already running and I want to train our meter-man in using the balance.

Very truly yours,
E. H. Lord, Treas.

1883-07-11

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. July 11th 1883

Thomas A. Edison Esq

Dear Sir

Your of 10th to hand —

The building will be complete in 2 wks from to day. — You can begin to ship boiler engine &c at once and the building will be ready by the time you can get to work. —

Yours F. G. Clark Pres

1883-07-26

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. July 26, 1883.

Thomas A. Edison, Ph. D.

Dear Sir:

Our central station building is ready for you and we are anxious to be in working order. When will your men and materials be here?

Very truly yours,

E. H. Lord Treas.

1883-08-02

Pemberton Company,

Agents Office,

Lawrence, Mass. Aug 2d 1883

Thos A Edison Esq

Dear Sir

Still waiting to hear from you in reference to the dynamos we have — I want very much to have them changed from 150 lb to 275 — each —, so as to be ready with wiring and all by Sept 1st — We hoped to have your men at work laying cables in the street before this — F. Pollard

1883-08-15.

AUG 16
FILE No.

Office of E. E. Ill. Co. of Lawrence
Aug. 15, 1883.

Thomas A. Edison, Ph.D.
Dear Sir:

Referring to yours (by your Sec.) of yesterday, I will say that No. 249 Essex St. has been wired for 90 lamps and is to be opened Sept 1st and if we are not ready we shall lose the contract and it is an important one; No 401 Essex St advertises to open a new stock with the Edison light on Sept 1st and many others are very anxious to have the light by that time.

Very truly yours,
E. H. Lord, Treas.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. W. U. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
189	f.h.		6 Paid

Received at ~~850~~ ~~791~~ BROADWAY.

Aug 21 1882 - 3

Dated, Lawrence Mass 21

To Thos A. Edison

Q Hs. vm ax

When will your men be here

E H Lard

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-08-24

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Aug 24 1883

Thomas A. Edison,

Dear Sir:-

Yours of yesterday is just rec'd. Maj. Eaton did meet Mr. Clarke and myself in Boston yesterday, but we got nothing more definite than "press of business"

Now when can you do something for us? Why not, as I suggested in mine of yesterday, let Brockton drop awhile & do our work, since we are waiting and Brockton is not.

E. H. Lord, Treas.

1883-08-24

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Aug. 24, 1883

T. A. Edison Ph.D.

Dear Sir,

Why can't you install our Station before the Brockton one? We have several hundred lamps all wired and the people are all anxious to have the light as soon as possible and one Mann's Store must be lighted by Sept. 1st, as he has no gas fixtures. The Brockton people have not wired a single place yet nor even made any contracts to do so. I think we deserve and need the first chance

Very truly yours

E. H. Lord, Treas.

1883-09-01

The Edison Electric Illuminating Co.

OF LAWRENCE

Lawrence, Mass. Sept. 1 1883

Thomas A. Edison, Ph.D.

Dear Sir=

The temporary fixtures which you have contracted to furnish us, I shall not need and if it makes no difference to you you need not send them.

The date for opening the block which is depending upon our light & is without gas has been changed from Sept. 1, to Sept. 20. Can you not get the cable in by that time? The delay is not only an inconvenience but is a serious loss to us.

Very truly yours,

E. H. Lord, Treas.

1883-09-11

THOMAS A. EDISON,
Central Station, Construction Dep't.
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

RECEIVED
SEP 11 1883

Address reply to .....

FILE No. .....

[illegible] 188[illegible]

[illegible]

Dear Sir

I have just got out from Sunnyside and I find there is Nothing or not Enough of any thing to do anything on - the Main Drain is there but Nothing has been done Six Days but on the Part of the Boiler foundation Walls but no Jet-Plate - no tubes from 65 avenue to Stamp - no Sand in any Quantities that the work should be commenced at once and there is no necessity at all the notices is not there - the Stones of the Foundation walls will keep the work here completed this week and can commence at Sunnyside next monday - he tells me that Mr Renwick thought he going had better come back to my for a week - and help there but he (Stevens) says the more have get there sooner we at Sunnyside Pipe and the would like every week to keep at it - if possible

[illegible] first of Sunnyside Station also two B.C. - of Pipe from [illegible] Streets as my Sand wants are for [illegible] are - [illegible] anything else [illegible] get [illegible] to say Repair or any thing else

Very [illegible] yours

W. D. Rich

1883-09-15

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Write Ed Williams

Lawrence, Mass. Sept. 15 1883

Thomas A. Edison.

Dear Sir. Yr Amp G.

Please send me at once one (1) motor of one horse power. If you have none as large as this, send the largest you have in stock and oblige

Very Truly

E. H. Lord.

Clarke —

Please inform Insull when one of the little motors are ready with fine cure fields —

1883-09-19

Lawrence Sept 19 1883

Dear Sir:

We have concluded to put us two 20 light machines for our small engine instead of running one "H" with it. Can you send them at once?

E. H. Lord & Bros.

1883-09-19 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No 65 FIFTH AVENUE,
NEW YORK.

RECEIVED SEP 24 188

W. D. RICH,
SUP'T OF CONSTRUCTION.

New York, Sept 19th 188

Address reply to

FILE No.

Samuel Insull Esq

Dear Sir

I have written to Alby Sims

[illegible], and then the to say - that it only cost 20c to connect the thread in the valve and there is plenty of metal left - furthermore it will cost more than that for the time of the men belonging to make the connection and after it is done it will not be a permanent job [illegible] the valve comes from the Sp. & Mach. Assoc. [illegible] - I have wired them to day to the Engineer [illegible] to see for it [illegible]

Very Truly Yours

W. D. Rich

Form No. 1.

1883-09-22

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case unless the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

SEP 20 1883

NUMBER	SENT BY	REC'D BY	CHECK
291	Cah		Paid

FILE No.

Received at 852 BROADWAY.

Lep 22 1888.

Dated Lawrence Mass 22

To Saml Insull 65 5 ave

Stephens is instructed to commence laying pipe at Broadway Lord wishes him to commence at Station & run

to Mer Block What objections answer

W. D Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1283-[illegible]-2'4 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

[illegible] 188[illegible]

Address reply to [illegible]

Samuel Insull Esq.
65 Fifth Avenue
New York

Dear Sir

Your interest from of Spirit of [illegible] in reply to the same I would suggest that the Engine boat [illegible] would as [illegible] by a tripod to run from the [illegible] and it can be placed on the bank and at the same time the Engine is set — In relation to Experimental expense I will future agree Suggestions in the future — as the Sun News Decided to have two twelve hundred light machines to be driven by the Engine which they now have there it is important that I should know the size of the bed frame & also [illegible] distance on [illegible] Journals — as soon as [illegible] per [illegible]

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

Form M.

W. D. RICH,
SUP'T OF CONSTRUCTION.

.....188

Address reply to.....

In Yours of the 19th
I cannot understand the charges which I was for
in my previous letter you have in mind the freight bills
both at Brockton & there which I have agreed to pay on
the last Day of the Month - the amount of which I will
send you on Monday next - on my copy, and Friday
Yours Truly
W. D. Rich

1883-09-25

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Sept. 25 1883.

T. A. Edison, Ph.D.,

Dear Sir:-

We will wait till the 200 light dynamos are ready. In regard to the tubes for connecting with the buildings please ask the proper persons to forward a general stock of what we shall need; also please send tubes to extend our mains as far as Mill St. which is the first street below Jackson on the south side of Essex St.

Very truly yours,

E. H. Lord, Treas.

Brockton, 1st October 83

E. A. Loud Esq
Treasurer
Edison Electric Ill Co
Lawrence Mass.

Dear Sir

With relation to the extension of your Underground System viz: the main feeder on Essex St on the South Side to the terminus of the Feeder which is about 180 ft beyond Mill Street & the Mains from Essex St through Lawrence St to the Central Station I beg to inform you that it will cost $1299 20/100. This amount covers running one side of the Street only & all necessary Junction Boxes & Joints & Service Boxes & Short Services.

This work McKinnei has ordered & I will be glad if you write me to New York confirming verbal

order given to Mr Kinnear
I have just heard from
Remington Rhine Co that the
14½ x 13 engine was shipped to
Lawrence this morning
Yours truly
Thos. A. Edison

1883-10-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct. 6 1883

Thomas A. Edison, Esq.

Dear Sir—

Wired you today concerning the extension of our system. It must be extended on both sides of Essex St. Please send 3 100 V. lightmeters I have one stor running now without meter as I have none large enough,

Very truly yours,

E. H. Lord, Treas.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

1883-10-10 Form M.

W. D. RICH,
SUP'T OF CONSTRUCTION.

Schenectady Oct 10th 1883

Address reply to Schenectady

Dear Sir

Your favor of the 9th inst. came to hand this morning - also the part of pattern & blueprint. I think I shall go down tomorrow to meet Mr Stout & find the [illegible] & [illegible] relation to cost of [illegible] & will be pleased to comply as far as possible -

About the work on the Street will be completed this week - except wiring Station - the Stevens will probably finish his work by the middle of next week - if the weather is favorable - The copy of the estimate which I sent you calls for 50 heters of 12 light - 25 of 25 f - & of 20 f you will see by Order no 230 & by letter that there has

1883-10-10 Form M.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. D. RICH,
SUP'T OF CONSTRUCTION.

.....188

Address reply to.....

Sent 20-6 light - 10-40 - 10-25 - 11-12 - the table now of water varied in 20-6 - 10-12 - 10-25 - 10-40 - the [illegible] light I have returned to Morgan on 21st - Mr. Adams [illegible] about the 10 light meters - Enclosed please find Order No 19 which - please send forward as long as possible

Charge me with $15.00 received for 1000 lbs R from [illegible] - also 12¢ for table which [illegible] — Also send charge for $600 [illegible] Note to look to Date of billing - can you give me the size of the Bed frame of the 10 light Meters - Mr. [illegible] said before me Spanish matter thought that it should be included in the Office furniture - and I understand you that you agreed also to it

Yours [illegible]

W. D. Rich

1883-10-11

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Franklin House
Lawrence Mass
~~New York,~~ Oct 11 188 3

Thos. A. Edison
New York

Dear Sir —

In Lawrence Cen. Station, one of the side-walls has been sheathed for the reception of pressure indicators &c. This wall is only five feet distant from the line of dynamos — and I think it would be quite impossible to make these Instr. work in such a situation. Moreover there is not sufficient room here for Banks of Resistance, which must be placed close by Indicators.

Please telegraph at once if I may order Carpenters to put up necessary

1883-10-11

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

sheathing at other side of the Room

If you would allow me the opportunity to make suggestions as to the placing of machinery and Insts, before arrangements are Completed, I could sometimes save Expense and inconvenience —

Yours very truly
W. S. Andrews

I want to place Indicators & Revi. banks there, like I did at Shamokin — behind the Engines, where there is plenty of room

1883-10-14

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Franklin House
Lawrence

New York, Oct 14th 1883

RECEIVED
OCT 16 1883
ANSWERED
.....188..
FILE No.....

Chas. Ansell Esq
Lawrence —

Dear Sir —

In the matter of the Electric Lighting referred to in your favor of the 12th inst., I can arrange for all the various provisions of running, by means of reversing switches and plugs, and send you a sketch of the proposed arrangement — [illegible] [illegible] [illegible]

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

2

1883-10-14 Form L

New York, ... 188

or together. This arrangement however does not provide any connection of these lamps in series with the 800 light machines, nor provide a means of showing that each is [illegible] the 800 light machines are coupled in multiple arc with either of the 800 lights or leave no way of showing that each is [illegible] can [illegible] [illegible] a [illegible] light system working in series [illegible] the number of blades in the long [illegible] and to make the [illegible]

1883-10-14

Form L.

3

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

[illegible]

1883-10-14

Form L.

4

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

You have not yet answered my letter of
[illegible] last letting up shutting on
other side of [illegible] engineer for
[illegible] indicator. Could have this work
commenced tomorrow, as it is an absolute
necessity, but I will see that it is done
as cheap as possible — When will the
[illegible]

Concerning the [illegible] boiler
and safety bottom, I find that they
[illegible] in any [illegible] but
would suggest that both [illegible] be [illegible]
on executive board — [illegible]
[illegible] to [illegible] and [illegible]
[illegible] stand. They would also be full of gas.

1883-10-14

Form L.

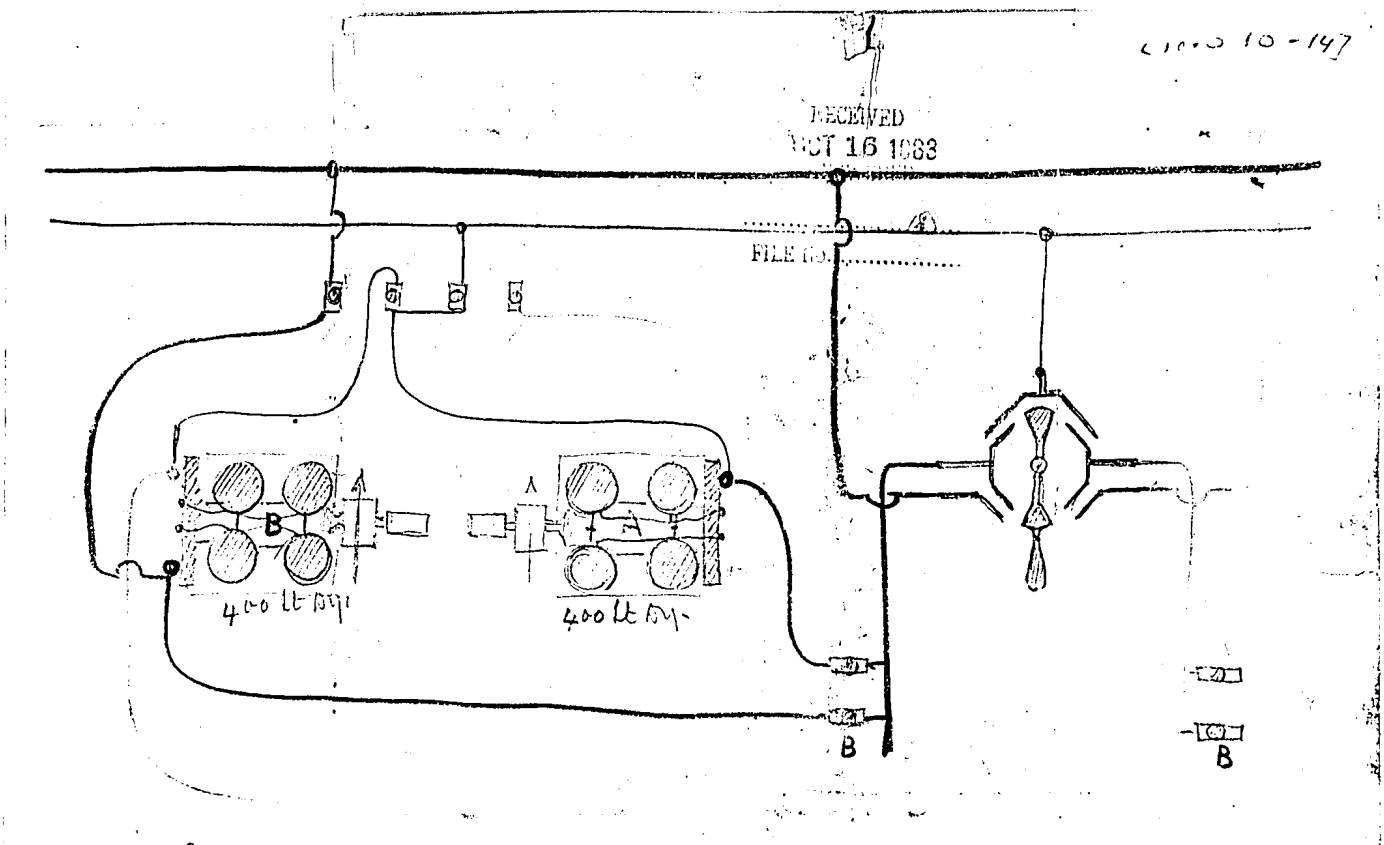
THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Concerning the "H." Dynamo, the small square headed bolts used for clamping the commutator on the end should be shorter. Spread two lockers, but have found blocks on at most from time I was in New York I provided myself with bolts spare ones or should have been obliged to have had some made. The two [illegible] clamped out on every case — [illegible] arrangements and [illegible] block [illegible] on the subject.

Very truly yours
T. A. Edison

[ENCLOSURE]



Connections for 2 400 lt Dynamos to be used for sparc &c — When running these machines in series with 220 Volt current, plugs [illegible] all in Reversing switch open & plugs A A B B all out

When running either or both Dyn on one side only, plugs all out and plugs A A or B B or all four of them in — Right or left direction of reversing switch then determines which side they are on —

[ENCLOSURE]

69

Oct. 14/83

W. S. Andrews

re the Laurence

Dynamos

OFFICE OF 1883-10-15

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct. 15 1883

Thos. A. Edison

Dear Sir.

We need the meter man immediately. Please let us hear from you in regard to it and oblige

Edison Electric Ill. Co
E. H. Lord. Pres.

RECEIVED
OCT 16 1883
ANSWERED

FILE NO.

1883-10-16

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct. 16, 1883.

Thomas A. Edison,

Dear Sir:

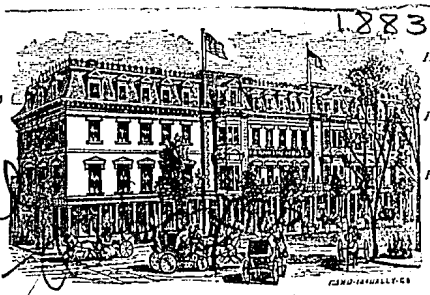
Referring to my order by telegram I write confirm the same which was to extend our mains on both sides of Essex St also the feeder to catch-box No. 6, said box to be located about 180 east of Mill St.

Very truly yours

E. H. Lord, Treas.

1883-10-19

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.
A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

We will have two Lawrence, Oct 19th 1883.

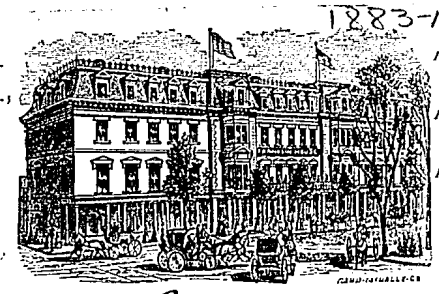
Saul Snell Esq
New York City

Dear Sir

Your letter of the 17th to hand. Cost is not in the matter of correcting up the field of 2 400 light dynamos that I find any difficulty — That matter can easily be arranged — It is simply a matter as to whether the field of the 200 light machine is so proportionally built with regard to the field of the 800 Light machine

1883-10-19

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.
A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

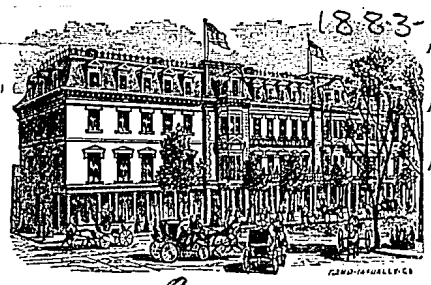
2

Lawrence, 1883.

that by coupling their respective resistance boxes or regulators together, the single motion of the hand wheel (that works both regulators at the same time) shall reduce or increase the Elec of both the small & large machine Exactly the same If the machines and resistance boxes are so calculated and built as to fill these conditions I shall have no trouble in connecting them up — If they are not I can't see how I am to

1883-10-19

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.
A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

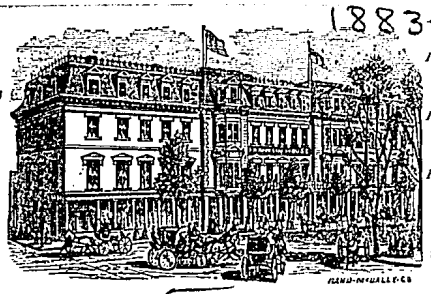
3

Lawrence, 1883.

make them go this way. By all means send me the old style Indicators until the new ones are ready. Am very glad to hear that the new one is such a success. Send also the Ampere meter for middle or compensating wire. The zero of this Inst must be in middle of scale and it must indicate 100 Amperes both right and left. You do not say how you like the arrangements at Shawmut Station.

1883-10-19

FRANKLIN HOUSE,
BROADWAY,
LAWRENCE, . . . MASS.,
Opposite B. & M. R. R. Depot.
A. B. Davis & Co.,
Proprietors.



House Renovated and Refurnished.
Heated throughout by Steam.
First-class in all its appointments.
Terms: $2.00 and $2.50 per day.

5

Lawrence, 1883.

I will do all I can by way of forwarding the meter arrangements, but hope you will send on Quant on earliest possible opportunity.

We used one of the Hy Dynamos last night on outside circuit, and both Engine & Dynamo worked very well. I think we will start the three wire system to-morrow Evening. ~~Oak St~~ Underground system is in good working order as far as completed.

Very truly yours
W S Emmons

1883-10-22

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct 22 1883.

Mr. Insull,

Dear Sir,

Yours of Sat. in relation to the cost of the extension of our underground mains & feeders. In reply let me say that there can be no mistake with regard to the cost, as our contract with Mr Edison covers the entire system to be ordered as we desire.

Very truly yours,

E. A. Lord, Pres.

1883-10-25

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct 25 1883.

Thomas A. Edison,

Dear Sir:—

Yours (of 5) concerning check for $10,000 is before me. I shall be happy to send such a check when our meters &c. are ready to be used in connections with our plant. We are seriously annoyed by the delay in completing our plant, and would urge you to do so at your earliest convenience.

Very truly yours,

E. A. Lord, Pres.

1883-10-27

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

RECEIVED
ANSWERED
Nov 5/83
FILE No.

Lawrence, Mass. Oct. 27, 1883.

Saml Insull, Esq.,

Dear Sir:-

I have seen a letter from you to Mr. Andrews stating that the balance sent us for weighing meter plates is adapted to 100 light plates. I have had much experience in the use of chemical balances and am confident that said balance is not capable of weighing 300 grams. The weights moreover are only sufficient for 200 grams.

I append a list of meters now on hand.

Meter boxes

10 for six lights		20 for 12 lights	
15 " 25	"	10 " 50	"
5 " 100	"		

Plates + rubber parts.

These are just sufficient for the above boxes.

1883-10-27

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

2.

Lawrence, Mass. 188

Bottles

30 for 6 lt. meters - 40 for 12 lt. meters
4 " 25 " " 20
10 " 100 " "

You will see that we have 10 extra bottles for six light meters, but are 16 short for the 25 lt. meters.

Our order No. 1 calls for 50 meters of 12 lights, 25 of 25 lts, + 5 of 50 lts.

I will keep the extra meters now on hand for 50 + 100 lts. also for plts. but would prefer to change the no. of 12 lt meters to 25 and the not 25 lt. meters to 50.

With this change I would like the order completed at your earliest convenience. Please include also the 50 extra assorted bottles, plates and rubber parts called for in our order No. 1.

Very truly yours,
E. H. Lord, Treas.

1883-10-27

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

RECEIVED OCT 31 1883

Lawrence, Mass. Oct. 27th 1883

Sam'l Insull Esq—
New York

FILE NO.

Dear Sir

Everything is going on nicely about Station here. The pressure indicators came safe to hand, but it will take me some time to put them in working order, and even then it is doubtful how long they will remain so—

An iron bottle of mercury has come to hand for amalgamating the meter

1883-10-27

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

2

Lawrence, Mass. 188

plates— We have always hitherto used the double distilled, that is sent out in stone bottles, and I fear that the mercury sent is not pure enough for the purpose. — I shall borrow some double distilled from Mr Lord, and you can order on 10 lb, so as to enable me to replace what I borrow—

We are having some trouble with fixtures that have been sent here ready wired

1883-10-27

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

From Mr. L. Bergmann & Co
but I think this matter
has already been noticed
in complaint book — I enclose
a piece of wire that came
out of an Electrolier — There
seems to be something in
the paper that eats away
the wire, and ends in a
total break —

I am sorry to hear that
Mr Edison has been sick
and hope he is better

Very truly Yours
W. S. Andrews

OFFICE OF 1883-10-29

The Edison Electric Illuminating Co.

RECEIVED OCT 31 1883

OF LAWRENCE.

Lawrence, Mass. Oct 29th 1883

FILE No.

Saml. Insull Esq
Newport

Dear Sir —

Now is it that the ampere meter has not been sent yet? — I cannot tell how the load is being distributed at present — In fact, our pressure and everything else almost is being determined by guesswork, pure and simple; but under all

OFFICE OF 1883-10-29

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

these drawbacks, we are doing quite as well as can be expected —

I hear that Mr Edison has struck a good thing to get rid of sparking at Com^tor by putting in wire between arm. Com^tor and Com^tor bar — Hope this is true

Yours Sincerely
W. P. Andrews

1883-10-30

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct 30th 188

Samuel Insull Esq
New York

Dear Sir —

Everything is going on well here, and dynamos are working nicely —

I have been supplied with insulated wire for Station work, and have had to use wire belonging to the company here —

I have used up to date for wiring the building and other purposes — 60 ℔ No 3 and 2 ℔ of No 14 — I want about 25 No 16 white for connecting up pressure

1883-10-30

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

indicators, also a box of 100 ℔ No 18 white — Will you order this in for me immediately by express please? —

One of our resistance boxes has given out, and I am going to take it up at Boston when I shall be in Boston I probably be able to procure it myself — If not I shall send back to Boston Office and use a cheque for $50.00 by return mail as I am out of funds.

Yours very truly

W. S. Andrews

1883-10-31

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Oct. 31 1883

W. D. Rich, Esq.,

Dear Sir:—

The injector man was here to-day and put in a new spindle, or what do you call it, in the injector but he failed to make it work and he says it will not work at a pressure above 75 lbs. He recommend a double injector at a cost of $125 which he says will work up to 125 lbs. We pay Edison $190 for injector and I think you can afford to give us this one Please give this matter early attention

Yours E. S. Lord, Treas.

1883-11-02.

RECEIVED
NOV 5 1883
ANSWERED
Nov 5/83 3
FILE NO.

Lawrence, Nov. 2. 1883.

Thomas A. Edison, Esq.,
Dear Sir,—

I have your of Oct. 31, also telegram of to-day. I see that you have misunderstood mine of the 27th and applied the no. 50 to the capacity of the meters instead of the no of separate meters. I will be more explicit. I will keep what I have on hand and want sufficient parts to make the same complete also the extra 50 assorted bottles & plates and rubber parts. I also want 5 more meters for 12 lights and 40 more meters for 25 lights making the total no. for 12 lights 25 meters, and the total no. of meters for 25 lights 50 meters.

Very truly yours,
E. L. Lord, Treas.

If you could master
the [illegible] Hague bag
[illegible], I think
you can get on
[illegible] and now long
[illegible] [illegible]

[illegible]

1883-11-03

OFFICE OF

Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Nov 3rd 1883

Dear Insull

Yours to hand — I am glad to hear that there is plenty of work ahead — Everything here is working very smoothly and orders are coming in quite fast for the light Mr Oakley arrived last night and I have put him to work today —

I have written for Kirby to come on and take charge of the wiring of a large

1883-11-03

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

Mill at Salem, — It will be a chance for him, and may lead to something permanent for him if he gives satisfaction I have offered him, for the last, $2.00 a day & Expenses —

Hope the Canal will come on soon — I need my watch

Wish you may have a very pleasant trip to England next month — Am glad to hear that Mr Edison has struck that resistance to do away with sparking

Yours very truly W. S. Andrews

1883-11-05

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Nov 5th 1883

Saml. Insull Esq
New York

Dear Sir —

I enclose you a sketch of my proposed connections for two spare dynamos in this station — You will see that I shall require in all five (5) plug switches — one of them being a three wire connecting switch, and the other four of ordinary type — They must all be heavy enough to carry 150 Amperes — Will you kindly

1883-11-05

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

2.

see that an order is sent to Bergmann for these things or I shall most likely be lacking them when wanted Please do not forget to order on by express the small insulated wire I wrote about on the 30th ult — If not already sent, make it 25 lb No 18 white, and send no No. 14 or if you would rather, I can get all the wire I want from the store in Station here, and have it charged — Please write at once

1883-11-05

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

3

Lawrence, Mass. 188

and if you will send or not — You have made no remark on the method of connecting bank of resistance boxes by clutches — that I sent to you some time ago — When may we expect the two small spares? We cannot run our day circuit very well until they come, and many people are clamoring for the light —

I should like to come to NY — next Saturday

1883-11-05.

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

4

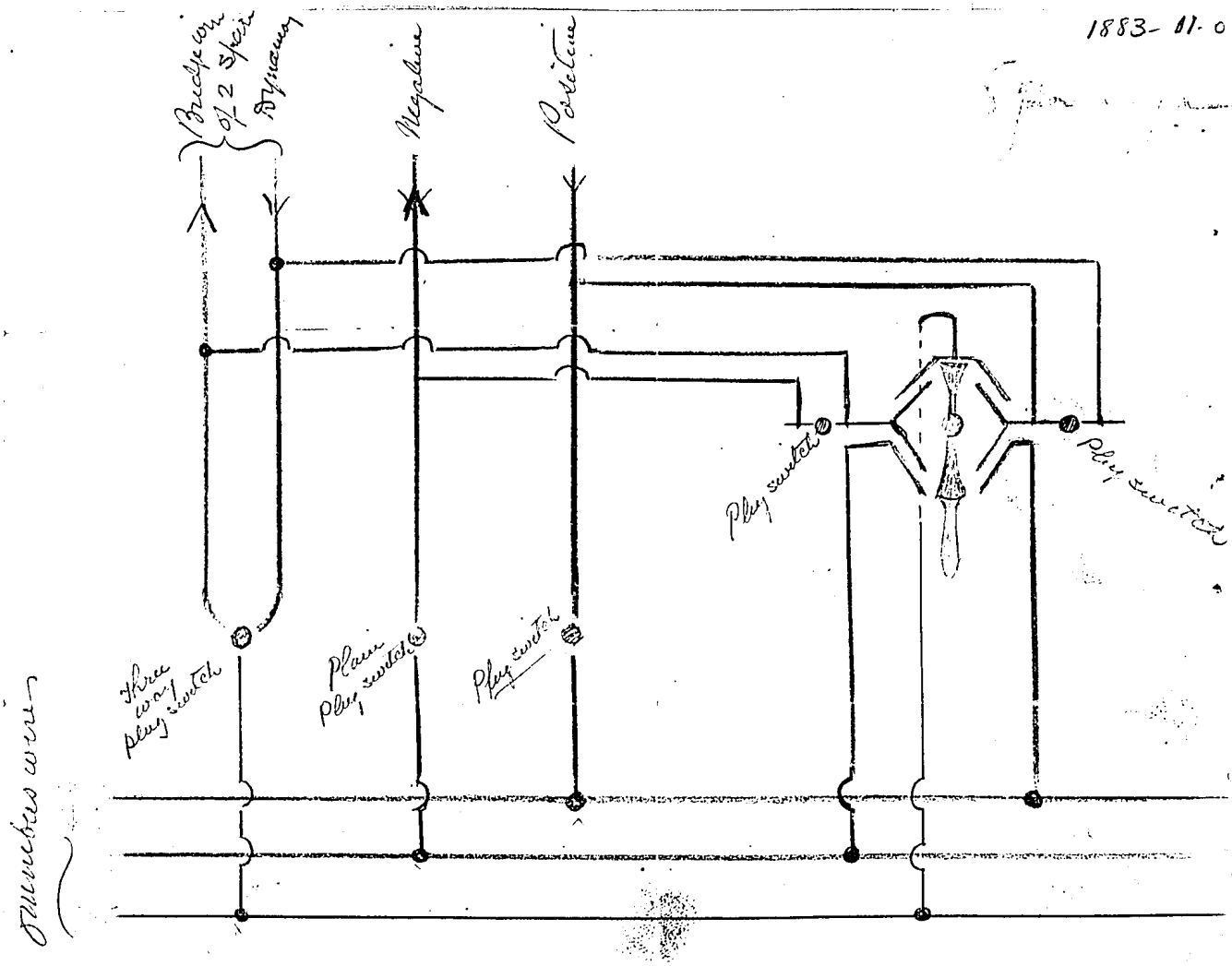
And return on Monday following — I suppose there will be no objection as everything is going on well — Prospects are looking good here, and light seems to be well appreciated

Very truly Yours

W. S. Andrews

[ENCLOSURE]

1883-11-05



[ENCLOSURE]

Sketch of proposed connections for two spare dynamos, at Lawrence Mass. station,

By W. S. Andrews, Nov. 5TH. 1883.

1883-11-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Berg for Mr. Noted B & C

Lawrence, Mass. Nov 6th 1883

Thos. A. Edison Esq
New York

Dear Sir,

I find that the copper wires fastened into the 12 and 25 light meter plates are too long —

The wires on 12 light plates have to be cut down to 3¼ inches and those of the 25 light plates to 2 inches —

Had not this matter better be looked into and alterations made? They have been

1883-11-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

continually sent out this way for a long time past, and it is a source of inconvenience as well as an unnecessary waste of copper to have to cut them all down

The wires on 6 and 50 light plates are of right length —

Very truly Yours
W. S. Andrews

1883-11-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Nov 6th 1883

Dollar with Dynamo bill
Sizes of Dynamo
Let Dollar brush
the Dollar brush

Saml. Insull Esq
New York

Dear Sir

Your telegram to hand this afternoon, and we shall be very pleased to see you here on Thursday

Will you kindly send to this office, and charge to the Lawrence Co. two pair of the shut brass brush holders such as are used in the H Dynamos

1883-11-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

2

Lawrence, Mass. 188

Only the shut brass holder is wanted, that the copper brush slides up and down in, and as they are light I should think they might be sent by mail —

They are for the Russel Paper Co. who are running an L Dynamo, but by using the H Dynamo slides they can work the H Brushes and the slides can easily be filled into their regular

1883-11-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

3

Lawrence, Mass. 188

brush holders that fit on brass studs —

Will you also be kind enough to send me the floor space, and pulley size of the 200 and 100 light Dynamos (New style) — Everything is running nicely here and you will probably receive Cheque for $10,000 before you read this —

Very truly Yours,

W. J. Andrews.

1883-11-06.

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

RECEIVED NOV 7 1883

Lawrence, Mass. Nov 6th 1883

Samuel Insull Esq
New York —

Dear Sir

I am glad to learn that Mercury is all right — Mr Oakley is getting on very well with meter —

Insulated wire came safe & hand yesterday

1883-11-06

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

You will in all probability receive Cheque from Mr Lord this week —

If I should come to New York next Saturday, may I expect the balance of money coming to me as I shall want it

Very truly yours

N. S. Anderson

1883-11-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 7 1883

Saml Insull Esq
Boston Mass

Dear Sir:

Since dictating the accompanying letters to you I find a letter to Mr F. E. Clarke of Lawrence under date Apl 28/83 of which the following is an extract

"If you decide to cut off the conductors "beyond Jackson St, the cost of the Strat "installation will be $7982 and if "subsequently you decide to lay No 6 "Feeder and the balance of the mains "this work would cost you $3337 "or $363. more than if the whole "work is done in the first case. I "Enclose blue prints one showing Camps "and the other showing feeders"

You will see by this that

1553-11-07.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

#2

New York, ... 188

the Cost of laying mains to Jackson St was $7982 and of subsequently laying Tunnel No 6 & balance of mains Cost was $3227 — Total $11209.00 This latter amount exceeds the amount of our Contract for that installation ($10846) by just $363 from which I infer that we subsequently agreed to complete the work without making the extra Charge of $363.00 —
The point is to obtain from Mr Lord the ~~[illegible]~~ maps sent with letter of April 28th last —
Yours truly

[ENCLOSURE]

1883-11-07
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, November 7th. 1883

Samuel Insull, Esq.

Boston, Mass.

Dear Sir:-

In relation to Lawrence, I beg to say that in accordance with our Order No.1, as per the item on the attached statement marked "C", the Illuminating Company is indebted to us to the extent of $9,734. In accordance with item "A", which I believe was accepted by Mr. Lord, it being the same bid that you made to him from Brockton, they owe us $1,299.20 Item "B" is for the extension of the mains on the North side of Essex Street, and is the amount in connection with which we had the correspondence with Mr. Lord, and he did not appear desirous of accepting our figures for this work, stating that his contract with Mr. Edison covered the full system to be ordered as they wished. Item "D" is for laying mains to the City Hall, which was not included in our contract, and amounts to $108.14 The amount of the bill which I attach is for house services, tools &c., as per details shown, and amounts to $1,149.88, and these amounts aggregate $12,716.66. The full amount of our contract with the Edison Electric Illuminating Company of Lawrence for street installation is $10,846. You will notice that in Order No.1 the amount for street installation is

[ENCLOSURE]

1883-11-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

2

$9,734., which is item "C" on the attached statement, and this deducted from the full amount $10846.00 allowed in the estimate for street installation leaves a margin of $1,112., which was to be devoted to completing the system in accordance with our exhibits sent with the estimate, but inasmuch as they have ordered more work than we agreed in the first place to do, they have exceeded that amount considerably. I have deducted from the statement $100. for a meter balance which we agreed to supply in Order No.1, and which was charged into the Lawrence Illuminating account erroneously.

You can make any other deductions you see fit, for as I do not know the amount you would wish to deduct for office furniture, inasmuch as we specified none in our estimate, I consider it better to leave this for you. You will see that the amount which the Lawrence Company owes us is $1,770.66 ~~and~~ over and above our contract with them.

Very truly yours,

A. Dale

[ENCLOSURE]

1883-11-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, November 7th, 1883

Samuel Insull, Esq.

Boston, Mass.

My Dear Insull:-

In regard to our Lawrence affairs I am sending you two bills. One is itemized and shows the actual cost to us for the material supplied by Kruesi for house services,&c. and the other is the regulation bill with twelve per cent added, which latter I presume you will use for collection. I regret very much to say that I have hunted everywhere to obtain a copy of the Exhibit which accompanied the estimate we sent to the Lawrence Company amounting to $32,572. but have utterly failed to obtain one, nor can I find anywhere the letter which I am still under the impression you wrote designating the course of the mains.

I am very sorry to have to write you this, but it is simply impossible for me to discover where this data is, and you will now have to obtain the Exhibit from Mr. Lord. The course of the mains as specified in our Order No.1 is in accordance with Item "C" on the statement which I have attached. I cannot even find Kruesi's bid for the street installation in accordance with the ~~Item~~ Estimate (you will understand when I say estimate I mean the full Order which includes Order No.1).

[ENCLOSURE]

1883-11-07
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

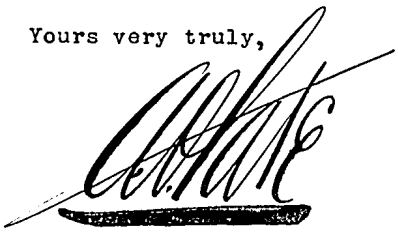
2

In relation to Brockton accounts, I have also enclosed two bills, one itemized for your own information and the other with the twelve per cent added.

I trust that you will recognize the fact that this data is as complete as I can make it, and at the moment of writing this I am in the same humor as you will be at the moment of reading it.

I enclose the Lawrence contract which you may possibly want in settling up affairs there.

Yours very truly,



1883-11-13

New York
Nov 13th 1883

Thos. A. Edison Esq
Dear Sir

I cordially agree with Mr Sprague in his objection to the use of plug switches in the matter herein discussed And I think that the plan of using two large reversing switches is decidedly preferable —

Very truly Yours
M. S. Andrews

1883-11-15

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 15th 1883

Thos. A. Edison Esq
Newyork —

Dear Sir —

I am informed by Mr Lord that our two "H" Dynamos in this station will very shortly be loaded to their full capacity — It is therefore absolutely necessary that something positive should be done in regard to the spare for it will look very bad if we have to refuse customers on account of insufficient capacity And besides all this, it is too risky to run such a plant as this with absolutely no provision in case of a breakdown. This matter I have urged in former letters —

If there is no chance of getting the spare for another month or two, I think it would be strongly advisable to put in two more H Dynamos

1883-11-15.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Not of course that it is a matter between you and the Company but still [illegible] to do — I simply desire that you shall fully understand how things are [illegible]. I have the assistance here all lined up [illegible] and everything [illegible] is ready for this completion at any time —

Things are running very smoothly here and we have between 600 & 700 lamps connected — and this full load is on for [illegible] days

Will you kindly let me know what you are going to do about the expense for this [illegible] and [illegible] be expended

Very truly yours
[illegible]

1883-11-16.

Insull ans

Lawrence, Nov. 16, 1883.

Thomas A. Edison, Esq.,
Dear Sir:—

I wish you would give me definite information about the time when I can have the 200 light dynamos for our station. I am about closing some contracts for furnishing light & power thro' the day and it is very important for me to have some statement on which I can rely as to the time when I can have the machines. I also ~~wt~~ want a 200 and 200 light machine both of which must be ready to start Jan. 1st.

Very truly yours
E. A. Lord, Treas.

1883-11-17

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Clarke

Lawrence New York, Nov 17th 1883

Samuel Insull, Esq:
65 Fifth Avenue,
New York City.

Dear Sir,

Allow me to inform you of the various difficulties I have labored under for after few days past in the prosecution of my meter work here.

1st. The varnish glue furnished, primarily gave good results, but when applied to a run of 7 to 8 hours and the plates are then removed, it becomes flaky and upon redoff the paint. And if the plates are again put through the solution becomes clouded and particles of glue are drawn down as a heavy precipitate.

The glue has undoubtedly been cut, in the first instance with Benzine, instead of Chloroform & ether.

2nd. The solution prepared in one of graduated outer bottles upon the shunt the presence of Iron and same became introduced in solution from particles of basic salt of iron, imbedded in the glass of bottle.

3rd. In making the test for Iron, I discovered that we could not rely on the tannate and sent home for the reason that it is also impure and contains Iron.

The result has been that I have been compelled to scrape all the morning glue from the plates and recoat them with a glue prepared according to rule and to discard one of Pelletier meter Bottle sent here.

Yours Respectfully

L. H. Clarke

1883-11-17.

Lines Telegram

Lawrence, Nov. 17, 1883.

Thomas A. Edison, Esq.,

Dear Sir:—

I have today made an estimate for a plant requiring a 200 light dynamo and the closing of the contract depends on the time when the lights can be installed. Will you tell me by telegram (at my expense) when you can positively furnish me the dynamo. I am also in great haste for the machines for our central station.

Very truly yours,

E. A. Lord, Treas.

1883-11-19

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence ~~New York,~~ Nov 19th 1883

Saml Insull Esq,
65 Fifth Ave N.Y.

Dear Sir
I send
by express this P.M. the Question
books Hoping that you will find
them in Good order
I remain
Yours Truly
H M. Doubleday

1883-11-19

Form D

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York~~, Nov 19th 1883

Saml. Insull Esq
New York —

Dear Sir
I send herewith enclosed some of the zinc sulphate delivered to the Station for make solution. I have tested it and find it very pure of iron — Should like you to have it tested in New York — to see if it is up to average purity

It does not work well in battery — Our ice water contains a very faint trace of iron, but not enough to hurt solution —

Very truly Yours
W S Andrews —

1883 11·19

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York~~, Nov 19th 1883.

Saml. Insull Esq
New York —

Grower shows make it at Gowrie

Dear Sir,

In the matter of Marine glue, of which I wrote last week, we are still having trouble with it — Mellen [illegible] you sent me [illegible] Let him make some for us quick & send it on

Of course we can make it here but [illegible] beauty is not the equal of theirs, and a vast amount of annoyance & lost time would be saved in the future if you would adopt my suggestion & get the Central Station to have the glue made all ready for use in New York and tested there before any of it is sent out —

One of the 8 litre bottles sent here

2

1883-11-19

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

is covered with black specks and the zinc sulphate that was in it has come very strongly — I put some fresh in this bottle, and tested, and got a pure iron test — Clear glass bottles must be selected for this purpose, and those with black specks must be rejected by giving each the black specks are evidently black oxide of iron imbedded in the glass —

I am now wiring the station here for lamps, and want staying Packet No 560 — length 24 in — for the office desk, and two of No. V.7 Sufflamen No 1 — for engine rooms — Will you kindly order these on by express as

1883-11-19

Form 1.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

soon as possible — Have put three plain drops of gas-pipe to light engine Room and two do in Boiler room —

I hope you have ordered the large copper wire to Fall River, for I do not want to be kept waiting for material when I get there —

When are you going to send on Charles? We want him badly —

When may I expect the Engineer, meter, and the pressure indicators? Hurry them up if you please. They are urgently wanted —

Everything is working well here — We are running one 700 lamp every night. Respectfully Yours

T. A. Edison

1883-11-20

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York~~, Nov ~~19~~ 20 188 3

Frank Sewell Esq
New York

Dear Sir I wish you could make it convenient to send Conant on here [illegible] been very unlucky somehow In the first place, the Juice Salts Solution does not work well and appears to contain heavy traces of iron — Secondly he cannot get the marine glue to work well, and between all

1883-11-20.
Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

[illegible] Underground Conductors. I have not yet got half a dozen men in — I cannot blame him, for he has worked hard, and done all he could — but his experience [illegible] [illegible] [illegible] [illegible] to his line, does not seem great. Would you could send an Overseer if you in any way [illegible] [illegible] [illegible] the work [illegible] Department —

Yours very truly
[illegible]

1883-11-20.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York~~, Nov 20 1883

Saml. Insull Esq
New York

Dear Sir

Could you procure some Marine Glue from Central Station ready mixed up bright consistency and send same by exp. to Lawrence immediately ?—

I cannot make anything of glue sent here, and cannot buy raw rubber anywhere

Send right off if possible

Yours very truly
W. S. Andrews

Colon is Covered over

1883-11-21

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass.
~~New York~~, Nov 21st 1883

[illegible]

Dear Sir —

[illegible]

[illegible]

[illegible]

[illegible]

1883-11-21

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass

~~New York~~, Nov 21st 1883

Saml. Insull Esq

Dear Sir —

The Blue prints have not yet come to hand and I cannot understand reason of delay — I am glad that I engaged Lyne last night & sent a fresh set —

Book of Dynamo Questions and Answers safe to hand — Tell Mr Edison that I will keep it out of Every body's sight —

Umpire meter has not yet turned up — This is really somewhat

1883-11-21

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Sirs - for I cannot tell how to balance up System - I read at Bergmann's that it was already repaired and tested when I was in New York - What on earth is it delayed for? Do be kind enough to look into the matter and have it hurried off.

I don't know what they will do here for want of the spare dynamos - the cars here will soon be loaded up to full capacity, and then they will have to stop connecting in customers

Very truly Yours —

M. S. Sudrow

1883-11-23.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York~~, Nov 23rd 1883

Saml. Insull Esq
New York

Dear Sir

I enclose a list of tools that I have been obliged to buy, for use in fitting up Central Station — It was at first my intention to say nothing about these, but find it rather a heavier tax than I expected, moreover I have to lend out the tools to the men working for me, so I desire to ask you if I cannot with propriety add the amount of this list to my expense A/c — I have furthermore paid $20.00 for a good strong tool chest, but as this may be considered a luxury more than a necessity, I will cheerfully pay for that myself

Very truly Yours
W. S. Andrews

1883-11-23

Personal

Lawrence Mass
Nov 23rd 1883

Dear Insull

Leonard turned up to day at noon. Your letter concerning him came to hand, and I will keep a look-out on him in future.

I believe he was all day yesterday in Boston. He said that he should have been here last night, but missed train.

I have put him in charge of the meters in this place, as he has had more experience than Oakley and the latter is considerably under the weather. Says that he is subject to bad spells of neuralgia. He came to work however this noon and I hope that the two of them will pull together & make up for lost time.

Yours very truly W S Anderson

1883-11-24

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Thank you better send him A+Q
books

Lawrence Mass
Friday ~~New York~~, Nov 24 1883

Thos. A. Edison Esq
Dear Sir,

Enclosed please find receipt for chk 302 for $40.00.

Arrived here this morning. There are some forty consumers are present being supplied with light by the Co. here.

There are 3 meters running upon the circuit. Mr. Casey has been indisposed of late. He has tested most of the meters however & I shall have them put in as soon as possible, as I can.

I set the thermal strips in all the meters here today and shall be in work at setting them out tomorrow.

The sulphate of zinc sent here contains rather more iron than it does, & I am inclined to think that iron has gotten into the solution we have used, from foreign sources.

for tho' the sulphate of zinc gives ~~strong~~ indications of iron, the solution gives much stronger indications of it.

The flocculent ppt. of hydrate which forms in the bottles is much more abundant here than I have observed elsewhere & is very strongly colored by hydrate of iron.

I shall attempt to eliminate the iron by electrolysis & expect to be able to do so. Have a test under way now bearing on that point.

The lamps at Brooklyn were being run much above candle-power as I ascertained by photometric tests before leaving. The same is true of Lawrence. Heavy breakage is a natural consequence.

The slips upon which are recorded the weights of the flakes are not in my opinion a sufficient or ready record of the metal & I beg to submit to you the enclosed

1883-11-24

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

form, with Mr. Jenks has adopted at Brockton. I think it is necessary that the slips should be loose & in fact think it is a very considerable advantage to have them in book form, as the slips are apt to become soiled & mussed.

I should also suggest an addition & improvement of a much larger space for "Remarks". & that there should be kept a monthly record of any noticeable features of the appearance of the meter, box or bottles.

Such a record will soon be valuable for reference.

Upon data furnished me by Mr Upton I figured the resistance of the 16 candle lamps here at 146.6 ohms & that of the 10 candle lamps

as 233 ohms. This gives us a constant of $17.70 per gram of zinc for Lawrence.

I will thank you when you send me a copy of the answers to Questions on Motors, Batteries & Engines, & Dynamos.

My second set of answers & the new Questions I have sent to your disposition. I wrote as long ago as Friday from Washington some days weeks ago or so but have had no reply.

Construction Dept stationery not O.K.

Please have me coming to me at Fifth-ave forwarded here.

Yours very respectfully

H. Wansemann.

Enclosed herewith
Letters of Lawrence
Bell Mass. Berlin

1883-11-25

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
394	Koh & Pg		306

Received at **852 BROADWAY.**

Dated Lawrence Mass 28 November 1888.

To T A Edison

Send Meters ordered also fifteen More for Six lights

E H Lord Treas

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-30.

Lawrence, Nov. 30, 1883.

Thomas A. Edison, Esq.,
Dear Sir
Yours concerning payment of $3000 is rec'd. The contract says the third payment shall be made in thirty days after the plant is completed. Our plant is not completed. We have no ampere meter, no indicators (or worse than none) our meters are not all here, the connections of the injector to the boiler are in the same condition as they were when I called Mr. Insull's ~~at~~ attention to them, our Engine has 10 in. belts when it should have 12 in. so I think our directors would not consider I was right if I should pay the amount at present

Very truly yours
E. A. Lord, Treas.

(18)83-12-01

His ideas seem to be good,
Edison

Lawrence Mass
Dec 1st 83

Thos. A. Edison Esq.
Dear Sir,

Your favor of the 28th reached me yesterday. I supposed this my explanation of my desire to draw $100.00 has reached you. You will see that I did want to overdraw to the extent of $20.00 by my own account.

There is the "general discrepancy" as you term it, of $40.00 this time in your accts. & I wish you wld inform me of the true state of the case as soon as possible.

In regard to the meter slips, I see I assumed too much in supposing that you understood the nature & purpose of the slips. I will explain.

These slips are supposed to be a complete record of the working of the meters. Upon them is recorded the weight of every positive plate that leaves

the central station. I enclose one of the forms wch you sent to Lawrence filled out as it will be in practice. You will observe that the two wts. of the A bottle are upon the same horizontal line & separated by one wt. of the B bottle.

Thus it becomes necessary, to insure accuracy, to set down elsewhere the two wts. of the A bottle & perform the subtraction, in order to get the loss. But even this is not recorded. We have to do the same for the B bottle & then average the losses of the two bottles & record finally the mean of the two losses under the heading "Waste Grammes". Thus a great deal of important arithmetical work is not recorded & having only the final results before us, any error wch might possibly have been made is not nearly so evident as when all the work is right before your eyes.

Furthermore in order that the meters shld work properly each customer

shld have a certain particular size of meter & this size is determined by the nº of lamps he has and the amt of his deposit & also the size of his lamps sometimes becomes an element of the problem.

Now upon referring to the slips sent here you will observe that there is no provision made for a record of either the kind (size) of lamps, nor the number of them, nor upon wch side of the circuit they are connected.

The old slip is for 6 months. Mine is for 1 year.

You appeared satisfied with the report I last made you from Brockton. Now it is just such a report as that, that I wish the meter slips to be. At present such information as I sent you comes from my private note book & ~~after~~ when I leave a place such a record wld go with me, unless copied from my book.

Frequently items of apparently small moment might be recorded under the head-

of "Remarks" wch individually might be of slight importance but when viewed collectively with the record of a year, might prove of extreme importance.

Tho' you may not be satisfied with the form I presented, you certainly can not fail, if you understand me at all, to be dissatisfied with the existing form.

By the way, another very unnecessary & in my opinion, bad feature of the present system is the fact that the slips are not bound into a book. I need scarcely dwell upon the manifest advantage of having them in book form.

What I have said of the incompleteness of the slips is equally true of the "Ledger" wch you sent here.

I enclose as full a report as is possible of the meter dept of Laurence. Mr. Oakley who has been indisposed for some time past, left for his home this morning.

Following is the

1883-12-01

5

Lawrence Meter Dep't Report.

by Howard Leonard. Dec 1st/83

(A = +, B = −)

Sub's No	Subscribers Name	Business	No of Lights	c. p. of Lights	Size of Meter	Date set	Side of Circuit	Remarks
1	Sharon Bros	Dry Goods	20	16	25	Nov 9	B	
2	J. W. Bradley	Saloon	10	10	6	Nov 13	A	
3	Essex Savings Bank	Bank	8	16	6	Nov 13	A	Current Reversed Thro Meter
4	H. M. Whitney	Drug Store	27	16	25	Nov 26	A	
5	Public Library	—	48	16	Contract		A	
6	S. P. Snell	Dry Goods	20	16	25		B	
7	B. F. Hawes	Hatter	17	16	25	Nov 26	A	
8	C. H. Chamberlain	Physician	6	10	6	" 27	A	
9	J. G. Abbot	Express Off.	4	16	6		A	
10	B & L. R.R. Depot	—	44	16	Cont.		A+B	
11	O. P. Gurdy	Restaurant	14	16	12	Nov. 30	B	
12	Shattuck Bros	Grocers	16	16	12	" 30	A	
13	Sherman & Bell	Lawyers	3	16	6	" 26	B	Mains enter on R.
14	Gurdy	Fruit Stand	4	16	6		B	
15	City Hall	—	3	16	6		A	
16	Carleton & Bevington	Dr's Office	4	16	6	Nov. 26	A	
17	John K Norwood	Ins. Office	4	16	6	" 27	B	
18	Kiley Bros.	Dry Goods	18	16	12	" 30	A	
19	Home Club	—	27	10	Cont.	" 30	A	

1883-12-07

(A = +
B = −)

6

Lawrence, Dec 1st/83. H.W.L.

Sub's No.	Name	Business	No. of Lights	C. p. of Lamp	Size of Meter	Date Set	Side of Circuit	Remarks
20	Colburn Bros	Stationers	11	16	12	Nov. 26	B	Thermal Lamp not set.
21	Byron Pruell & Co	Dry Goods	94	16	100	" 30	B	
22	Cannons Commercial College		16	16	12	" 28	B	
23	Boston Branch Clothing Co		27	"	25	Dec 1st	A	
24	a.a. Spofford.	Dry Goods	21	"	25		B	
25	Geo. E. Chickering	Druggist	10	"	12		—	
26	Lawrence	Post Office	25	"	Cont.		B	
27	M.A. Powers & Co	Clothing	18	"	25	Nov 27	B	
28	Bay State	Bank	6	"	6	Nov 26	B	
29	J.A. Crummett	Butcher	5	"	6	Nov 27	A	Thermal Lamp not set.
30	E.A. Fiske	Paper	18	"	12	Nov 26	B	~~Nov.~~
31	P.B. Robinson	Boots & Shoes	20	"	25		B	
32	W.E. Seed	Tailor	18	"	25		B	
33	Jos. Stowell	Stable	10	"	Cont.		A	
34	P. Sweeney	Furniture	15	"	12		A	
35	Mrs. Sheldon	Millener	12	"	12	Dec 1.	B	Thermal not set.
36	F.S. Jewett	Furniture	16	"	12		—	
37	Mrs. Colburn	Millener	29	"	25	Nov 27	B	
38	J. McConnell	Restaurant	18	"	25		—	
39	Hotel Brunswick	—	7	"	12	Nov 27	A	
40	Mrs. Cowan	Millener	21	"	25		A	
41	H. D. Morse	Tailor	6	"	6		B	

1883-12-01
7

Meters are now running in every place ready for them, with a few exceptions where 25 or 16 light meters are required. I have no more meters of those two sizes & hence can do no more in the way of setting out meters until the new lot arrive.

When I arrived here they were running the 16 c lamps at 24c. I am now running them at about 18c & dare not lower them more as customers notice the difference & think they are being swindled.

With nothing more at present and an empty purse, I am,

Yours very resp'ly
H. Ward Leonard.

Lawrence.
Dec 1/83

1883-12-04

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Menlo Park, N.J.

~~New York~~, Dec 4th 188[illegible]

Geo. Ansell Esq
New York

Dear Sir

I leave this noon for Cincinnati & probably remain there till [illegible] expect progress in [illegible] as possible after arrival. Please send me by return mail a Cincinnati Cheque for $50.00 and oblige

Yours very truly
T. A. Edison

1883-12-6

Lawrence Mass
Dec 4th 83

Thos. A. Edison Esq,
Dear Sir,

I recd, day before yesterday a box of $Zn SO_4$ & suppose it was sent to replace that already here. The old $Zn SO_4$ contains considerable Iron but I have gotten rid of it entirely by simple precipitation by immersion of amalgamated Zn plates in the solution & it now tests perfectly pure.

The fresh lot of sulphate tests very well indeed.

However I am of the opinion that the presence of even as much iron as the old lot originally contained did have no bad effect upon the accurate working of the meter, for the separation of the hydrate of Iron is an action entirely independent of

the current & the amt of the Iron is absolutely insufficient to have any appreciable effect upon the resistance of the bottle & then too, it rapidly settles to the bottom of the bottle below the plates. —

I had difficulty in getting a suitable box in wch to send the Becker balance, so had to have a box made, wch caused a few hours delay in its shipment. I did of course have telegraphed, if I had not sent it, but that my silence wld be evidence that it was all right.

Mr. Andrews & Mr Conant arrived here last night. —

I shall be ready to leave here in a few days. Everything is in ship-shape order & have no hesitancy in leaving the metn dept. Hope that you will be able to send me out

1883-12-04

3

to Ohio. Also wish to remind you that I have not heard from you in regard to the status of my account, nor have I rec'd the ch'k I asked for some time ago.

She'd like a ch'k in full settlement of acct as soon as convenient.

Yours &c.

H. Ward Leonard.

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Dec 6th 1883

Uncertain about pulleys

Swell Esq
New York —

E

have now decided to connect Bank
separate from mains in Station
one extra plug switch
Station.
Therefore kindly add
electrical material for Sub
Station

608/12/11/83 990 with 7/8" plugs
do do 3/4" "

Order No 608

[illegible] Building to measure

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

It would be a great improvement to have [illegible] of test lamps connected up [illegible], instead of being connected [illegible] mains as heretofore

[illegible] front of "S" Dynamo seating [illegible] to Mr Lord, the diameter of [illegible] this machine is put 10" [illegible] of capacity VC of the different Dynamos, sent same time, the diam. of pulley for "S" Dynamo is put down as [illegible] which is right?—

Yours truly

T. A. Edison

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass
~~New York,~~ Dec 6th 188

Mr. T. A. Edison Esq
New York

Sir

Allow me to repeat my
for one of the new
pressure Indicators
when I got up - I was
here in Lawrence

Very truly Yours
M. S. Andrews

1883-12-06

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence Mass

~~New York~~, Dec 6th 1883

Is the Engine pulley arranged to give the speed of 1300 Revolutions

Mr. A. Edison Const. Dept.
New York

Dear Sir —

The foundations are all laid for Edison dynamos in this place and the castings are in position, but they are much too large — However I can have some alteration made so as to make them do — Mr Rich had nothing to guide him as to size when he put them down —

Mr Lord has written to you to-day about some pulleys and engine pulley

Yours truly
M. Williams

1883-12-07

Edison gaming on a Quadruplex & also book of Stockton =

Lawrence Mass

Dec 7 '83

The blue book of wiring

Thos. A. Edison Esq

Dear Sir,

Expense acct from ~~settlement~~ Nov 28th to date is as follows.

Dec 3rd	Expressage	1.75
"	Brushes	.17
"	Sponge	.30
Dec 7th	Allowance 9 days	22.50
		$24.72

I sent you a few days since my answers to the Milu Questions. You will please notice that some of my answers are based upon different data from that in ordinary use especially that of the resistance of the solution

The printed answers to the Questions has not reached

1883-12-03.

2

me yet. Will you please also send me the Blue print "Tables of conductors" for 2 & 3 wire system recently gotten out.

Shall have the bottles taken out & bills made out for the first two weeks record in a few days & will then send you report.

Yours &c

H. Ward Leonard.

Form H.

File 1883-12-09

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Fall River Mass.

~~New York~~, Dec 9th 1883

Thos. A. Edison Const'n Dept
New York

Dear Sirs

Please find enclosed herewith
a set of material obtained from
the Lawrence Illuminating Co. and
used in wiring their Station. —

Tell your Kindly order
for Lawrence :—

1 Swinging Bracket No 560 Pol'd Brass
" Key Socket and dup Chain & Cade

This is for use in their office
over desk —

Very truly yours
W. S. Hughes

Enclosure

[ENCLOSURE]

1883-12-09 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, Dec 9th 1883

List of material used in wiring Lawrence Station, supplied by Local Co.

1	3 light Electroliers No 24 Pol. Brass (à Office)	11.06
1	Small switch No 210	1.65
8	No Key sockets Pol. Brass	5.04
5	Branch cut-outs — No 1 —	34
1	Main cut-out No 3	3.85
1	House changing switch	5.00
3	Porcelain Shades & Holders	1.20
		28.14

W. S. Andrews

1883-12-10

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
1	[redacted]IVED DEC 10 1883 ANSWERED	Cm 11 Nd	

Received at 852 BROADWAY.

Dated [redacted] 188..

Dec 10 1888.

Fall River Mass

To Saml Insull

65 Fifth Ave

Kerby is Working for Lawrence Company further particulars by Mail ~~prompt~~ prompt

W. J. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-12

Lawrence Mass.
Dec 12/83

Thos. A. Edison Esq.

Dear Sir,

Yours of the 11th inst. in regard to the Meter Blank rec'd.

I enclose a copy of the blank as I think it shld be arranged.

I wrote in my last upon this subject as to what I considered the advantages of its use, so shall not repeat.

Please send me a chk for $50. at your earliest convenience.

Had a little trouble last night with a hot mist, but all is running smoothly again tonight

Yours very resp'ly
H. Ward Leonard

P.S. Rec'd first part of the meter supplies from Bergmann today. Hurry up the 25-light meters as we are in great need of them. H.W.L.

1882-12-15

Mr Eaton

Lawrence Mass.
Dec 15th 82

Thos. A. Edison Esq.

Expense acct to 14th inst. is as follows.

14 Allowance - - - -	$17.50
12 Meter record book	2.00
	$19.50

Enclosed please find receipts for meter supplies rec'd the 13th inst.

Have had some trouble here of late wch I attribute entirely to incapable help. The engineer who has been employed here is not suitable for taking care of the engines & dynamos.

A few nights he allowed the mill to heat so that he melted out his Babbitt & in trying to keep the mill cool soaked the belt with water until it pasted at 10 o'c.

1883-12-15

P.M. All was in perfect order yesterday. Last night I was home with a severe sick headache & this morning I learn that he allowed the mist of the eccentric rod wick plays on the rock-arm of the valve motion, to become dry & bind & before Mr. Conant & Mr. Ford did do anything the mist & Rock had passed company & again the lights were put out a little early. Both accidents luckily occurred about 10 o'clock & little bad comment if any will be occasioned by it.

Both of these accidents are utterly inexcusable. That of last night will seem almost impossible for you understand, the mist has not a motion of over 30° all told.

Mr. Conant & I have advised Mr. Ford to obtain another Engineer & I think that the present Engineer will not be long mist

1883-12-15

us.

Today I am having all the meter bottles on the circuit changed & will present the bills to the consumers for the past two weeks upon next Monday or Tuesday, & will then send you detailed report of state of affairs here in the Meter Dept.

Hoping that you will remember my request for 50.00 soon, I am,

Yours very Resp'ly

H. Edward Leonard.

1883-12-19

9

I gave Leonard a Copy myself before the 6 Copies came & left Here before they came

Lawrence Mass.

Dec 19 /83

Thos A. Edison Esq

Dear Sir,

I certainly gave Leonard a Copy to mark his name in

Allow me to call your attention to the error you make in thinking that you have given me a set of the printed answers to "Questions on Meters" &c. You left six copies with Mr. Sprague at Brockton & afterward telegraphed him to send them all to you at once. I have not a copy & never had.

She'd like a copy if you see fit to send me one.

Am quite busy testing the new meters & changing the bottles on the circuit

Shall make report of affairs to you in a couple of days.

Am glad to notice the several improvements in the six and twelve light meters.

One of the S Dynamos is all set & connected. Mr started it up for the

1883-12-19

up to the 17th of Dec from date varying from Nov 26th to Nov Dec 5th, aggregate $342.80.

With nothing more at present I am, Yours &c

H. Ward Leonard.

[REPORT BY H. WARD LEONARD?]

Consumers. Dec. 20, 1883.

1883-12-20

Meter Dept. Report. Lawrence Mass.

No.	Name	Business	No Lights	Side	Size Meter	Gallons. Waste	Dec 17th Bill
1.	Sharon Bros.	Dry Goods	20	B	25	1,985	$27.79
2.	J. W. Bradley	Saloon	10	A	12	3.55	$4.97
3.	Essex Bank	Offices	8	A	6	116	$1.62
4.	H. W. Whitney & Co	Druggist	27	A	25	1,780	$24.92
5.	Public Library	Reading Room		A		Contract	$33.33
6.	S. F. Smith	Dry Goods	23	B	12	219	$3.06
7.	B. F. Hawes	Tents Furnishing	17	A	25	contract	$18.00
8.	C. H. Chamberlain	Physician	6	Overhead wire	6	250	$3.50
9.	J. G. Abbott	Express.	3	A	Contract		$3.67
10.	Boston & Lowell R.R.	Depot		P-F A-B	Contract		$22.33
11.	O. P. Gurdy	Restaurant	14	B	12	655	$9.17
12.	Shattuck Bros.	Grocers.	16	A	12	718	$10.05
13.	Sherman & Bell	Lawyers.	3	B	6	148	$2.07
14.	Gurdy Jr.	Fruit Stand	4	B	6		
15.	City Hall	Clerk's Office	3	A	6		
16.	Carleton & Berrington	Physicians	4	A	6	369	$5.16
17.	John K. Hollwood	Insurance	4	B	6	225	$3.15
18.	Kiley Bros.	Dry Goods.	18	A	25	1,105	$15.47
19.	Home Club	- - - - - - -	27	A	Contract		$20.83
20	Colburn Bros	Stationers	11	B	12	595	$8.30

No 2

1883-12-20.

No.	Name	Business	No Lights	Side	Size Meter	Waste Cars	Am'ts to Dec 17. Bill
21	Byron Lucce & Co.	Dry Goods	94	B	100	2,551	$35.71
22	G. C. Cannon	College	16	B	12	116	$1.62
23	Boston B. Clothing	Co. Clothing	27	A	25		
24	A. A. Spofford	Dry Goods	21	B	25	[illegible]	
25	G. E. Chickering	Druggist	10		25		
26	Post office	———	25	B	contract		$20.83
27	M. A. Powers & Co.	Clothing	18	B	25	987.5	$13.82
28	Bay State Bank.	office	6	B	6	160	$2.24
29	J. A. Crummett	Butcher	5	A	6	238	$3.35
30	E. A. Tuke	Paper.	18	B	12	812.5	$11.38
31	P. B. Robinson	Boots & Shoes	20	B	25		
32	W. E. Seed	Tailor	18	B	25		
33	Jos. Stowell	Stable	10	A	contract		$15.00
34	O. Sweeney	Furniture	15	A	12	155	$2.17
35	Sheldon & Wakefield	Milliners	12	B	12	625	$8.75
36	F. S. Jewett	Furniture	16		12		
37	Mrs. Colburn	Milliner	29	B.	25		
38	J. McConnell	Saloon.	18				
39	Hotel Brunswick	———	7	A	12	753	$10.54
40.	Mrs. Cowan	Milliner	21	A	25		

No. [illegible]

1883-12-20

No.	Name.	Business	No. Lights	Side	Size Meter	Waste Gram's	Bill
41	H. D. Morse	Tailor	6	B	6		
42	D. U. & C. M. Martin	Stoves	33		50		
43	Dyer & Co.	Toys Etc	10		25		
44	B. Kelly.	Saloon.	4		12		
45	Wm. Barrie	Tobacco	7		6		
46	Hunttown Bow	Jeweller.	7		6		
47	D. D. Mahoney.	Boots & Shoes	16				
48	A. A. Warren.	Clothing.	17				
49	H. A. Doe.	Jeweller.	2				
			726			$342	80
						Total Dec 17.	To

1883-12-22

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. Dec 22nd 1883

Thos. A Edison Constr. Dept
New York

Dear Sir

I find that only one Span Dynamo has been as yet del at this place, so I have to remove Mr Conant before the Connections are completed.

I feel sure that you will see the necessity of pushing forward the shipment of the

1883-12-22

OFFICE OF

The Edison Electric Illuminating Co.

OF LAWRENCE.

Lawrence, Mass. 188

other spare, more especially as it has been so repeatedly promised, and the two H's are running nearly a full load — Should any more accidents happen to Engine they have nothing to fall back upon and the consequences would of course be disastrous to our Electric lighting interests in this place

Very truly Yours

W. S. Andrews

Mr Leonard is left in charge here — for the present

1883-12-22

Maj Eaton

Lawrence Mass
Dec 22/83

Thos. A. Edison, Esq,
Dear Sir,

My expense acct for the week ending the 21st is —
Allowance - - - - - - - - - $17.50

Enclosed please find receipt for chk #407 for $50.00; also receipt for the Twenty 25 l. meters.

Also please find my report of the status of the meter dept here.

I have determined to keep the present meter man as he has been doing much better work of late & I consider that I shld be gaining nothing by employing the man whom I has on trial. I had to begin at the rudiments of everything with the meter man but have at last, I think succeeded in making him competent to take charge of the meter dept, & handle it properly.

You will notice that we have now 726 lights connected & that the bills

1883-12-22

first time last night. It was O.K.

Mr. Lord & I are not satisfied with the amt of work accomplished by the present meter man & Mr. Lord thinks of possibly replacing him with a young man whom I have on that account been breaking in during the past few days.

The Engines & dynamos are now working perfectly. Have new engineer & a decided improvement on the last. System clear of grounds & the light giving general satisfaction,

Yours very truly
H. Ward Leonard.

1883-12-25

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
NO. 65 FIFTH AVENUE,

Lawrence Mass.
~~New York,~~ Dec 25 1883

Thos A Edison Esq
Dear Sir,
Returned this morning from Boston where I had been spending Xmas. I found Mr. Howell, from the Lamp Factory here just before me. We tested the E.M.F. by a Thompson galvanometer both this afternoon & this evening.

We find running within one or two volts of the normal E.M.F., which is considered quite good.

Mr Andrews ordered from you some (90 lbs) #38 Copper wire and I send the [illegible]

1883-12-25

Form L.

7

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

I hope that you will send it immediately.

I will draw upon you tomorrow or one day sight draft for $37.00.

I wish that either you will allow me to feel at liberty to do this at any time or else that you will be good enough to send me a check in final settlement of my acct every month as it is a great inconvenience waiting for money & not getting it for ten days or so. Please let me know your wishes in regard to this matter. And please send me now at your earliest convenience a check in full settlement of my account to date.

Yours

1883-12-25

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

3

New York, 188

Our new engineer does his work well. The meter dept is O.K. Orders for lighting are coming in rapidly. Mr Andrews said that he did order one of Apint's blow torch for soldering purposes. If he has not done so I wish that you wld consider this an order & send me one at once.

With nothing more at pres. I am, Yours

T. A. Edison

1883-12-28

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Lawrence, Mass.
~~New York,~~ Dec 28 1883

Thos. A. Edison Esq.

Dear Sir,

Yours of the 26th was received today. Also your telegram advising me not to draw on you.

It is extremely embarrassing & disagreeable to be obliged as I frequently am, to borrow money from the local Cos. when I have money due me in N.Y. I hope that you will be able to make arrangements, so that I shall receive my salary & expenses periodically. S'pose like it bi-weekly or if that is not convenient, monthly.

Now as regards that matter of the answers to Questions.

Mr. Edison gave me in Brooklyn a book of unanswered questions for me to answer as he had not received any proof out of answers from Mr Clarke.

1883-12-28

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

You can readily see that it is not likely that he will give me the questions to answer & with them the answers to them.

I answered the questions in Brooklyn & notified your office that I held them at your disposal. You wrote to me since I came to Lawrence to forward the answers to Mr. and I did so. The first work in this you never acknowledged the receipt of the answers. Will you please inform me as to whether you received them or not?

It is, in all likelihood, this book with Mr. Edison is thinking of. At any rate I have not, nor did I ever have, a set of the answers, and shall like one, if you please.

I am now waiting for the wiring book which Mr. Andrews ordered from you some days since. I can do nothing more toward getting the 5 machines ready without them.

1883-12-28

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

3

New York, 188

I have been making some meter tests of late while the meters were exposed to a temperature below 40°F. and were therefore warmed by the thermal lamps. Shall thus get definite idea of the percentage of error at that temperature as I have other meters in series with the above, but with one at 90°F.

I am working up the following description of the ordinary meter methods: As meters come in from circuit, uncomplete plates & place anodes in most any chloride alkaline solution. This will dissolve the so called oxides & leave a fresh clean surface.

Weigh & couple up again & send out upon circuit. That is; do not amalgamate the anodes plate but once in a long time. This method will avoid the necessity of making a correction for oxidation & will save one-half of the present amount of weighing.

Hope that you will send me

1883-12-28

Form L

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Hoboken

New York, ... 188

[illegible] as book for [illegible] other [illegible] style & send you a copy of [illegible] other improvements upon the [illegible]

Please send me one alcohol blow lamp [illegible] also some Const. Dept. [illegible] with plenty of [illegible]

Shall expect a check in [illegible] week immediately.

Yours very resp'ly

T. A. Edison

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Missouri - Kansas City (D-83-049)

This folder contains correspondence relating to the canvassing of Kansas City and the aquisition of land for a central station. Most of the correspondence is by canvasser Paul D. Dyer.

All the documents have been filmed.

Form No. 1.

1883-10-14

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
97	Sp	J	8 Bl

Received at 852 BROADWAY.

Oct. 14 1883.

Dated Kansas City Mo 14

To Thos A Edison 65 Nassau

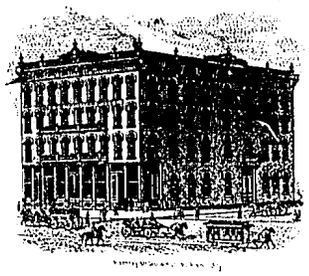
Metropolitan hotel send instructions if any express forms.

Dyer

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-14



METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. Oct 14th 1883

Mr Samuel Insull
#65 – 5th Avenue
New York.

Dear Sir:

I arrived here this morning at 9.30 after a journey of 36 hours from Maysville Ky. The journey was through a country entirely new to me, and proved extremely interesting. I was up by daylight this morning, & the country through which the were then speeding was intirely devoid of forest or population: its only vegitation a thick send grass.

One expected momentarily to hear the dreaded whoop of Indians or the more dreaded cry of the Cow boy.

However no accident occured, and your agent can go to work Monday with a covering to his brain.

The people about the hotel have a hard, heartless appearance: but it is probably not the result intirely of a low moral condition.

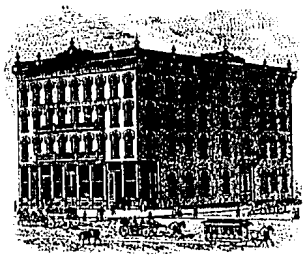
I am armed to the teeth; in fact, would not feel comfortable otherwise.

I had not commenced my canvass of Maysville Ky when I rec'd your order to proceed to Kansas City: But I had secured information about opera house & several other buildings which I will keep in case

1883-10-14

METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. 188



3 1883-10-14

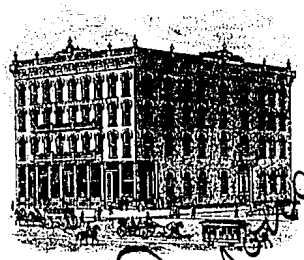
METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. 188

I go again to Marysville.
I know exactly where I can se-
-cure a map of that place in two
hours time.
I hope to receive instructions
from you early next week
or letters of introduction to interest-
-ed people there.
Kansas City is much larger
than any town I have yet
tackled: but I will go to
work on it Monday with a
determination to finish the
canvass of the whole town
within ten days.
Will write from here often.

Very Respectfully
Paul D. Dyer

1883-10-14.



METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Personal

Kansas City, Mo. Oct-14th 1883

Mr Samuel Insull
#65-5th Avenue
New York:

Dear Sir

If I could be gifted with Dickens powers of description for half an hour, I could relate an incident that has just happened in a manner that would convulse you.

Shortly before Supper the porter brought to my room the card of the Evening Star reporter.

I descended with a countenance especially drawn for the occasion.

The Hotel office was crowded.

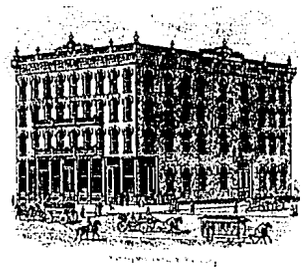
A tall, fine looking man, rushed up to me and poured forth a volumn of questions in a tone that interrupted all other conversation, & caused all eyes to scrutinize me keenly.

continued He would not be seated but, to ply questions & write down words & disconnected sentences with lightening rapidity.

After I recovered from the first blush caused by this mans monumental gall, I rose to the situation!

I knew there would be an item in to-morrows Star & I thought it would be policy that this item be something like a correct statement of facts, than absurd mis-statements by a man ignorant of the subject.

I did well; for I found this reporter an embodyment of ignorance, who actually thought the current to supply



1553-10-14

METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. 18

light flowed through a hollow pipe; was forced through in fact, by steam power.

While making matters plain to this exponent of the press he suddenly turned livid & implored me for Christs sake to speak in a whisper.

I noticed a red faced, impatient man pacing the floor with note book and pencil in hand, casting furtive glances in our direction, stopping occasionally to mop his brow & look volume volumes of curses at his brother scribe.

Finally his patience gave out and without apology for his interruption, he button-holed me, and opened

out like a big saw, ignoring the presence of the other man entirely.

Seize No 1 got up and paced the floor hurriedly several times, and returning opened a wordy war on Seize No 2.

A Stranger to the manners of this section of the Country must certainly have thought with me, that the only conclusion to this discussion must be bloodshed, and from the personal intent manifested by every man in the room, the carnage must be general.

The fact of being heavily armed gradually re-assured me, and I stepped between the combatants & smoothed over their ruffled feelings; by stating to the one a few facts in connection with my presence here for his report; and to the other (the more intelligent one) I gave more

1883 10 14

METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. 188

detailed accounts of what Mr Edison intends to do & what he has done already in Central Station work: his success at Cincinnati; the Louisville Exposition plant &c &c

I avoided giving information on points you would not care to have publicly known before a Company is formed: & lest he should make a mistatement I loaned him papers on the Sunbury plant, a bulletin & the Isolated Co's book.

I feel anxious lest these fellows have pooled issues outside and bulldozed the matter up.

Will send a paper to-morrow

I have always thought Dickens description of Sampson Brick overdrawn -

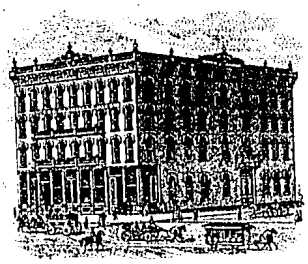
My contact with the Kansas City press adds to the charms of Dickens genius the feature of "Prophet -

Will write short letters frequently from this point informing you of the progress of my work

Very Respectfully
Paul D. Deyer

64
Oct 14/83
P. D. Deyer
remittance
with a pledge

1883-10-16



METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. Oct 16th 1883

Mr Samuel Insull
#65 - 5th Avenue
New York.

Dear Sir!

I rec'd Mr Edison's telegram this m'ng directing me not to purchase map.

There are several maps in Engineer's Office: but there has been such rapid changes in the growth of Kansas City, that a map made last year is far from correct.

The map the Engineer wanted $25 for is merely a tracing of City map from an atlas of about 10 pages, with corrections as he went along.

$10 would be cheap for such a map:

I made fair progress yesterday in my work.

When do you intend to have a man in this City to organize a movement? He should get here soon, before competitors come in. Kansas City is ripe for electric light enterprize.

I went over the Gillis Opera house this morning with its owner. He is among those who want the Edison light soon.

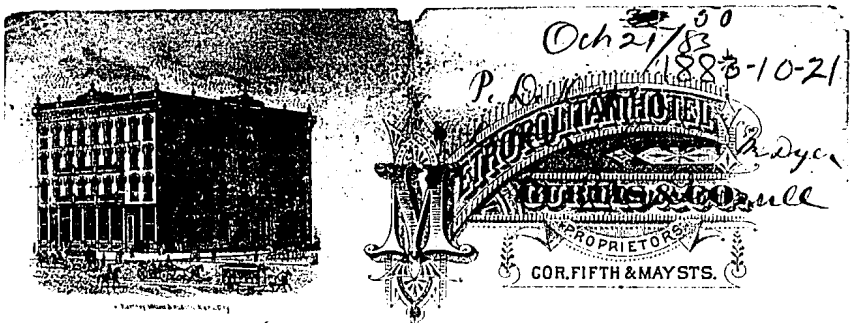
Please send money by money order or Telegraph. It will take too long to have a check collected for me.

Very Respectfully
Paul D. Dyer.

P.S. Do not forward mail.

Oct. 16/83

704



Oct 21/83 50
188 3-10-21
P. D.
Dyer
Bullard

Kansas City, Mo. Oct 21st 1883

Mr Samuel Insull:
#65 – 5th Avenue.
New York:

Dear Sir:

I have been writing steadily all day & have finished up finally 6.30 PM. And will devote this evening to the various Sanctuaries of the City.

I may possibly finish up before Thursday: if I do I will take the first train for the East.

When the report arrives at the office, by special freight, you will see that I worked hard on it.

All your letters & telegrams have been rec'd.

In answer to yours of Oct 6th returned from Woodstock & forwarded to Kansas City — I have rec'd from Mr Stuart $2 30 instead of $1 30.

I sent Mr Stuart a statement several days ago.

I appreciate deeply your favor of Sept 14th returned from London.

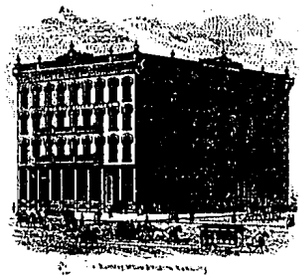
It comes late, but may ward off a relapse.

I presented my letter of introduction to Mr Winants, Cashier of Armour Bros' Bank.

He says his people here do not intend to put over $100,000. into the first plant.

His idea (also Benslin's) is to have two separate plants. The larger one to supply the retail business section,

2 1883-10-21



METROPOLITAN HOTEL
CURTIS & CO.
PROPRIETORS
COR. FIFTH & MAY STS.

Kansas City, Mo. 188

This section contains the Variety theatre, & majority of hotels & saloons.

The smaller one to supply Maj. Coates Hotel & Opera House & all dwellings within several blocks.

There is something in this scheme.

The only portion of the city where the dwellings are collected is on "Quality hill" & these dwellings are the finest in the city.

Coates' Hotel & Opera are located in this choice section.

The land between "quality hill" and the retail business section (2 Blocks) is only partially built up.

I will canvass it solid however, so if you determine to supply all from one Station, you will know what consumption to count on from Station and any objection point.

"Quality hill" must certainly have 1200 lights at least. The Majors property alone will probably take (I haven't been over it yet) Opera House 200 & Hotel 160 lamps. And say 50 dwellings at 15 lamps each, making a total of 1110 lamps.

If you underestimate the consumption of the dwellings you will get left.

The very best dwellings in the Pennsylvania towns, would rank 2d class here.

Mr Vincent will get me a map.

Very Respectfully
Paul Dyer.

1883-10-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
$7a			4 Paid

Received at 10 AM Oct 24 1883.

Dated Kansas City Mo 24

To Mrs Rame Insail

Cor a Street Room 2 Bradford Bl

Cin

I leave Kansas City tomorrow

Dyer

1883-11-28.

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Re Kansas City.

New York, 21st October 1883.

Mr. Tate,

Kindly send marked map herewith to our agent in Kansas city requesting him to send us options on land within the red circle, or as near thereunto as possible. —

Please also enquire if there are many telegraph poles in alleys thro' which we propose running our conductors, or if there are any objections in running in alleys marked out, — Can we get across block 47 as per my dotted red line? Can we run in streets where we put red line's, such as Delaware St, Fifth St. — Let him state to us any street where there wd be no chance of running poles. —

Yours

RECEIVED
NOV 30 1883
ANSWERED
Nov 30/83
FILE No.

1883-11-30

Mr. Brewster,

I beg to refer to you a letter from Mr. P. W. Bosgart of Kansas City and shall be glad to receive your views on same. Please return letter with your reply.

S. Insull,

November 30th. 1883. per G. K

[ENCLOSURE]

P. H. T.-11-1-93-3000.

1883-11-24

UNITED TELEPHONE CO.

47 WALES BUILDING.

W. B. CLARKE, Prest., Junction City, Kan.
J. R. MULVANE, Vice Prest., Topeka, Kan.
C. D. CRANDALL, Sec'y and Treas.
E. L. SMITH, Gen'l Sup't.
PAUL W. BOSSART, Sup't.

Write him saying that we can do nothing but have asked for information of what he has done here

Kansas City, Mo., Nov 21 1883

Thos A Edison Esq
#65 Fifth Ave
New York

Dear Sir -

Feeling almost certain that you would be disposed to favor your old acquaintances in matters of business pertaining to Electricity when such favors can be shown consistently and with profit and benefit to your Company and to your interests I am impelled to ask you to intercede for me in the matter of obtaining for me the right to use your incandescent lighting system in Kansas City.

I can guarantee to your Company a satisfactory local organization and am convinced that a good business can be done -

I have written to the Company direct and have been referred to a special agent (Mr Brewster) but from him I can receive no reply. Mr Brewster has been here I understand but so far as I can learn has accomplished nothing.

Having exhausted the usual formalities with the officers of your Company I appeal to you personally to secure to me the opportunity to -

[ENCLOSURE]

P. H. T.-11-1-83-3000.

1883-11-24

Edison

UNITED TELEPHONE CO.

47 WALES BUILDING.

W. B. CLARKE, Prest., Junction City, Kan.
J. R. MULVANE, Vice Prest., Topeka, Kan.
C. D. CRANDALL, Sec'y and Treas.
E. L. SMITH, Gen'l Sup't.
PAUL W. BOSSART, Sup't.

Kansas City, Mo. 188

introduce your System in Kansas City.
I have not been so fortunate as many of my old associates in reaping a bountiful harvest from the rapid strides made in Electrical Matters in the past few years, and will feel Exceedingly grateful for any opportunities you may see fit to Extend. besides will do my best for your interest so far as my skill & ability will permit.

Trusting the Above may receive your favorable Consideration I am

Yours Very Truly

Paul W. Bossart

1883.11.30

New York Nov 30/83

Major S. B. Eaton Pres

Dear Sir

The only criticism I have to make in regard to Mr Bossert's letter is that he is one of that vast army with "everything to make and nothing to lose". Whose guarantee, would be backed by no investment.

My answer to all inquiries from Kansas City is to say: if Messrs Ammons, Wimants Holden, Coats & al cant put our interest on a moneied & paying basis there, no other parties can.

As yet, we have never given them (these Kansas City parties) a chance to act. See last two letters from Mr Wimants & myself. The former talks what they would do; the latter was a half complaint from Mr Wimants, which I asked ~~them~~ you to answer direct.

As in the Kansas City case, so also in Louisville, St Louis, St Paul & other cities I have given the unfavorable as well as the flattering aspects. Hence I predict you will be less disappointed in the results than where, whether in Kansas City or elsewhere others promise big results, and say Mr Bennett has accomplished "nothing"

Very Respy Yours

Wm F. Bennett

1883-12-01

Mr. Insull,

We have excellent connections in Kansas City, but we are waiting for St. Louis to act first. We think it will pay us to wait a little longer, inasmuch as St. Louis is pretty likely to do something.

S. B. Eaton

Dec. 1st. 1883 Per M.C.G. A. A.

1883-12-04

Armour Brothers Banking Co.

A.M. Armour, Prest.
S.G. Armour, V. Prest.
W.H. Winants, Cashier.
E.E. Prindle, Asst. Cashr.

Kansas City, Mo. Dec. 4th 1883

Thos. A. Edison Electric Co.
New York

Dear Sir

I am in receipt of your two favors of 30th and in reply would say that if you can give me some idea as to the proportion of the lot necessary for the works I can give much more satisfactory information in regard to cost &c. The ground covered by the red circle is nearly all of it of the most valuable in the city, and none of it with I think less than $250 to $300 per foot. Property north of 3rd & 4th between Main & Wyandotte could be purchased cheaper. If you can tell me about how large a building you will need I could then look up some suitable locations & report. About the extreme eastern part of red circle is some property which might be purchased at fair figures, but is all rock & would

St Louis Lock Wire Fence Co.

1823-12-04

Armour Brothers Banking Co.

A.W. Armour, Prest
S.H. Armour, V Prest
W.H. Winants, Cashier
F.E. Prindle, Asst. Cashr

Kansas City, Mo. _____ 188

have to be blasted if we will take level of street.

And putting up pole line you would be unable to run on either Main or Delaware St. running north and south or in 5th & 6th — running east & west. The whole question of putting up poles would have to be decided by the City Council & there is no knowing how they would act. The street railroad houses are fully occupied now & it is certain that no more poles could be placed on them. I think that if we desired to run in alleys there would be less objection. Very few of them are occupied & some that are now by telephone lines will soon be vacated. In case proper permission can be had for running overhead lines in alleys I can see no reason why we could not run in Blk #47 where you have

5

1883-12-04

Armour Brothers Banking Co.

A.M. Armour, Prest
S.H. Armour, V. Prest
W.L. Mounts, Cashier
E.E. Prindle, Asst. Cashr

Kansas City, Mo. 188

dotted line. The alley is open full length.

The paving on streets is as follows.

3rd St. fr. Wyandotte to Main. cedar blocks
4 " " " " Delaware " "
5 " " Broadway " Gd Ave. " "
6 " " " " Delaware " "
Delaware " Third " 9th " " "
12th " " Main " Bdway " "

all with 9 in. concrete foundation

An ordinance was passed last night by Council to pave Main from 3rd to 20th St. with same. The other streets are macadamized, and I think you would find no rock to speak of in putting down underground lines except on Walnut St.

Referring again to matter of the lot I would say that if an alley and of a lot could be purchased & would be large enough we might get

St Louis Book Stat Company.

H

1223-12-04

Armour Brothers Banking Co.

A.M. Armour, Prest
S.B. Armour, V.Prest
W.L. Winants, Cashier
L.E. Prindle, Asst Cashr.

Kansas City, Mo. _____ 188

such a piece of ground for say fifty full days, for $100. to $150. per foot where the place of same size would be worth 2 to 3 time as much. Hold map here until I get further particulars regarding the matter from you.

Yours and brothers estimate on material souvenirs:

Yours Truly

W. H. Wanaits

1883-12-13

Kansas City

Mr. Tate:

In reference to Central Station in other place as next best position, I would suggest Northern portion of blocks 48 + 49 — blocks 6-7-50 + 51 — J. T. Turner
13th Dec/83

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Missouri - St. Louis (D-83-050)

This folder contains correspondence and other documents relating to the planning and arrangement of a central station at St. Louis. Some of the correspondence is from railroad companies in response to inquires concerning freight rates. Much of the correspondence is by William F. Brewster, agent for the Edison Electric Light Company and the Edison Company for Isolated Lighting.

All the documents have been filmed.

1883-05-26

RECEIVED
MAY 28 1883
ANSWERED
May 30 1883
FILE NO.

Mr. Edison

Re St. Louis people. Mr Chouteau & Mr Parsons petitioned the St. Louis Council last night for certain rights of way in connection with their conductors

S. B. Eaton
for Mr

May 26. 1883.

1883-05-26

Mr. Edison

Please telegraph Brewster, Southern Hotel, St. Louis, Mo., tomorrow when estimates will go.

S. B. Eaton
for Mr

G.F.A.Form 5-A

06-30

June 19th. 1883 3

General Freight Agent, Penn. R. R.

Phila. Pa.

Dear Sir:-

Will you please quote freight rates to St. Louis. I am likely to ship to that point a very great deal of material, including boilers, engines and heavy machinery, within the next few months.

Very truly yours,

Send copy to agents D.L.&W., B.&O., Erie, Phila & Reading N.Y. Central & H.R.R.R. Co's.

Pennsylvania Rail Road

Special contracts terminate with the Calendar Year.
Special Rates may be advanced at any time at the option of the Company.

John S. Wilson, General Freight Agent.
John Whittaker, Asst General Freight Agent.

General Freight Department.

Philadelphia June 20th 1883

T. A. Edison Esq.
#65 Fifth Ave. New York

Dear Sir.

Replying to your favor of 19th inst. The present rate on Boilers, Engines and Heavy Machinery in carload of 20.000 lbs, released, from New York to East St Louis Ills. is 42 cents per 100 pounds.

Yours truly
Jno S. Wilson
GFA
Warner

H. S. LITTLE, Receiver, 1853-61

OFFICE of the GENERAL FREIGHT AGT.

Central Rail Road Co. of New Jersey,

119 Liberty St.

P. H. WYCKOFF, G.F.A.

New York June 20 '83

T. A. Edison Esq.
65 Fifth Ave.

Dear Sir.

Replying to your favor of the 19th inst. Will say that we cannot name rates N.Y. to St Louis. Will you kindly advise me what other points you may ship to on line of our road and will gladly quote you rates.

Truly Yours
P. H. Wyckoff
G.F.A.

D 1883 Menlo Park

New York, Lake Erie & Western Railroad Co.

Westward Freight Office, 401 Broadway.

A. H. WARD,
General Eastern Agent.

New York, June 20th 1883

Thos. A Edison Esq
No 65 5th ave
N Y Ci

In reply to your note of the 19th requesting rates on Machinery Engines Boilers &c. My to St Louis, I herewith enclose a copy of our tariff showing the classification of your freight and the present rates on the different classes to East St Louis Ills - in addition to which your shipments will be charged the regular bridge toll to St Louis depot. - Would be pleased to have you call upon me when you are ready to ship

Yours Truly
A. H. Ward
E. E. A.

1883-06.

THOROUGHLY FIRE PROOF.

THE SOUTHERN HOTEL CO.

J. H. BRESLIN, President.
GEO. W. ALLEN, Sec'y and Treas.
CHAS. P. WARNER, Vice-Pres.
WILLIAM R. ALLEN.
THOMAS BRESLIN.

The Southern.

C. P. WARNER, General Manager.

St. Louis, June 20th 1883

Thomas A. Edison Esq
New York

Dear Sir

The bill as amended by you, has been placed in Mr Scudder's hands. Unless there is an unexpected compromise and adjournment, I think the Mayor will consent to lay it before Council & that we shall get the rights. We are sure of the Mayor's minority of six, and the leader of the majority has promised that his majority of seven will give matter fair & prompt treatment.

Let me urge you to hasten the Estimates all you can, as all our friends are rich men who go away for summer. Several have now gone. Pierre Chouteau (cousin of Mayor) will return next

THOROUGHLY FIRE PROOF. 1883-06-20.

THE SOUTHERN HOTEL CO.

J. H. BRESLIN, President.
GEO. W. ALLEN, Sec'y and Treas.
CHAS. P. WARNER, Vice-Pres.
WILLIAM R. ALLEN.
THOMAS BRESLIN.

The Southern.

C. P. WARNER, General Manager.

(2)

St. Louis, 188

Saturday & be here only a few days. I depend largely upon him & Mr Chas Parsons for active interest. Geo E. Leighton one of most sanguine friends has gone to Europe.

Please furnish with Estimates Electrical & Rolled Maps & table of profits on 1/4, 1/2, 3/4 & full Capacity of Plant.

Shall remain here until I do something or see nothing can be done.

For the Co. I consider this Central plant working well & profitably of the very greatest importance & will put Chicago on its mettle.

Yours Faithfully
Wm. F. Brewster

1883-01-20.

Address all Communications to the Company.

The Babcock & Wilcox Co.

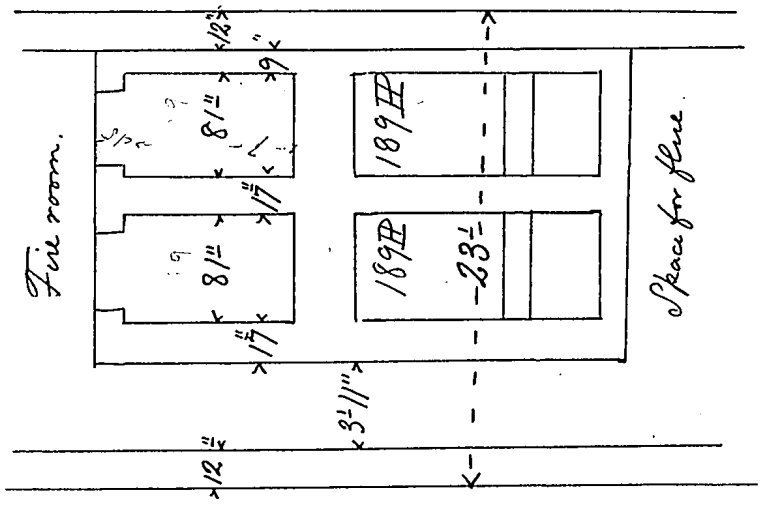
Patent Water-Tube Steam Boilers,

30 Cortlandt Street,

New York, June 20 — 1883

2nd.

C. H. Campbell.



Boiler
St Louis

1883-06-22.

THE NEW-YORK CENTRAL & HUDSON RIVER RAILROAD CO.

OFFICE OF THE GENERAL FREIGHT AGENT,

GRAND CENTRAL DEPOT,

All special rates, except when made for a specified time, will expire one year from date of contract unless sooner cancelled. No rate shall be in force except on being previously advised of its acceptance.

DICTATED LETTER.

SAMUEL GOODMAN, Ass't General Freight Agent.

New York, June 22nd, 1883. 188

T.A.Edison, Esq.,

65 Fifth Ave.,

City.

Dear Sir:-

Referring to yours of the 19th inst. I will transport Boilers, Engines and Heavy Machinery from New York to East St. Louis at 42 cents per 100 lbs, when in full car loads, and at 89 cents per 100 lbs , when in quantities less than car loads.

Advise if accepted.

Yours truly,

S. Goodman,

A.G.F.A.

W.

1883-06-25

Is the MOST THOROUGHLY **Fire-Proof Hotel** IN AMERICA.

The Entire Ceiling of the Basement is formed of **BRICK ARCHES,** Laid in ENGLISH PORTLAND CEMENT.

The Entire INTERIOR CONSTRUCTION of **IRON, CEMENT AND CONCRETE.**

NO WOODEN PARTITIONS OR LATHING USED.

The Southern

C. P. WARNER, General Mgr.

THOROUGHLY FIRE-PROOF.

J. H. BRESLIN, Prest.
CHAS. P. WARNER, V. Prest.
GEO. W. ALLEN, Secy. & Treas.
WM. R. ALLEN,
THOMAS BRESLIN.

ROOFING, Four Inches of **Cement on Iron Beams.**

FOUR IRON STAIRWAYS From Top to Bottom.

No Exception to this THOROUGH FIRE-PROOFING in any part of the Building.

The Proprietors so believe in its infallibility that they DO NOT carry **ONE DOLLAR OF INSURANCE** on the Building or Furniture.

St. Louis, June 25th 1883

Thomas A. Edison Esq
#65 Fifth Ave New York

Dear Sir

QW

It is an open question, whether or not we can get Mayor to present our Bill for Ordinance, or whether we will have to wait till regular session in October.

I deem it very expedient to commit these people here to a definite action & shall recommend (if can get rights) 1st to Buy lot, 2nd Immediately organize 3rd Contract for Licence with Co and with you for Plant, 4th Build requisite Station 5th Wire & light so much of Blk, Sta is in, as they can as soon as they can. 6th Prosecute Isolated bus. All this can done prior to Oct session of Council, when can certainly secure Rights.

Now in sending Estimates I wish you would state 1st whether in furnishing Current to that one Block, whether same mains could be used in general system, when came to supply the other surrounding Blocks named in Estimate. 2nd whether it would be advisable to insist on putting in all the Dynamos, Engines, & Boilers at once, before Rights to cross streets are obtained.

I have very good reasons for desiring information these

We couldn't use the main of the one block but could light it very cheaply with wire which could be taken down when mains ~~wire~~ put in = ~~could~~ ~~We will hold back~~

~~our Dynamo~~

We could take out some of Engine Dynamo etc but it would cost more as we should have to have one man go there twice -

1883 06-25

St. Louis, _____ 188

parties quickly as possible.

I consider the delay in furnishing Estimates until our most Sanguine friend Col Leighton has gone to Europe, until some Parties have become lukewarm, until the Pat^t questions have arisen, and until, our ever enterprising Competitors, have tried to defeat our object, may cause a very promising scheme, to fail.

Kansas City and several other points await, & will be guided by action here.

Prince Chouteau has become slightly defeated by the Local Wonder, a Mr Adams who exhibits, in Private, a Dynamo, an Arc Light, an Electric R R, and some of our Incandescent Lamps. Mr Parsons told me of it Confidentially as Mr Chouteau had come to get his opinion. Mr Chas^t Parson Pres. State Swing Ass^n is a staunch believer in our Enterprise, and he says he can get enough to take hold of it anyway. Mr Parsons, told Chouteau that any fool could get up an Arc Light or get a few Edison Lamps—which is true.

Unless I am very badly fooled Mr Parsons means to take hold of this, and will secure all the [illegible]

1883-06-25

Is the MOST THOROUGHLY **Fire-Proof Hotel** IN AMERICA.

The Entire Ceiling of the Basement is formed of **BRICK ARCHES,** Laid in ENGLISH PORTLAND CEMENT.

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The Southern

C. P. WARNER, General Mgr.

THOROUGHLY FIRE-PROOF.

J. H. BRESLIN, Prest.
CHAS. P. WARNER, V. Prest.
GEO. W. ALLEN, Secy. & Treas.
Wm. R. ALLEN,
THOMAS BRESLIN.

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St. Louis, _____ 188_

we want. I very much wish that either you representing the Electrical side, or Mr. Eaton representing the Executive & Legal Dept could come out here. Not that I am afraid of myself, but Millionaires like to talk with Principles. The party of gentlemen who met me two months ago, ordered that Canvass & Estimate could buy any quantity of Appleton & Davenport parties, and they were more ready to deal with them.

I meant to be brief, but I have strung out a long letter. I know there are several other places in the world than St Louis, St Paul, Minneapolis, Louisville & Evansville, but I took a pretty large contract on hand, and I want the Quartermasters, Commissary, Paymaster, Engineer & Executive Depts not to let the forces in the field be forgotten.

Sincerely Yours
W. [illegible]

Form No. 1.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
416			10 Collect	1056

852 BROADWAY.

Received at 791 BROADWAY. July 2 1882

Dated St Louis Mo 21

To Thos A Edison 65 fifth ave

Neither running expense
profits nor gas receipts
accompany estimates
Brewster

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.
DIRECT WIRES.

1883-09-26

THE SOUTHERN HOTEL CO.

J. H. BRESLIN, President.
GEO. W. ALLEN, Sec'y and Treas.
CHAS. P. WARNER, Vice-Pres.
WILLIAM R. ALLEN.
THOMAS BRESLIN.

THOROUGHLY FIRE PROOF.

The Southern.

C. P. WARNER, General Manager.

St. Louis, Sept 26th 1883

Thos A. Edison Esq
New York

Dear Sir

Prince Chouteau told me that Edison ought to Illuminate next year during Fair week. He tells me they pay $15.00 per minute for 150 minutes per night. A crowd coming into his office, I did not learn full particulars, as whether this was only for lights in Veiled Prophet Procession (next Tuesday) or for the lights on each side of street. On the floats in procession are 420 Special Ker. Reflectors & 420 Bengal Lights, besides a Calcium Light stationed on each

1883-09-26

THOROUGHLY FIRE PROOF.

THE SOUTHERN HOTEL CO.

J. H. BRESLIN, President.
GEO. W. ALLEN, Sec'y and Treas.
CHAS. P. WARNER, Vice-Pres.
WILLIAM R. ALLEN.
THOMAS BRESLIN.

The Southern.

C. P. WARNER, General Manager.

St. Louis, ... 188

Block.

The number of extra gas jets is wonderful. Each block on each side has from 575 to 600 gas jets, in opaque shades, They placed on Gas pipe arches, the top being even with 2nd Story, with Christmas Tree groups above at every Store: these

or

the whole length of blocks on each side.

Beside these lights are many single & double arches made of Gas pipe the top 50 ft from Ground. One in front of Window has 160 Gas jets in Globes. The number of jets along the line of march must crowd a 100,000, Think that most of them are 3 ft & 1½ ft burners

If you could get away

1883-09-26

THOROUGHLY FIRE PROOF.

THE SOUTHERN HOTEL CO.

J. H. BRESLIN, President.
GEO. W. ALLEN, Sec'y and Treas.
CHAS. P. WARNER, Vice-Pres.
WILLIAM R. ALLEN.
THOMAS BRESLIN.

The Southern.

C. P. WARNER, General Manager.

J.E.

St. Louis, ... 188

from New York, it would pay you to see what they can do with gas.

But if you have any idea of coming telegraph me as Rooms are so scarce that they command 25 to 50.00 for the V.P. night on Line of march.

But I am secure & have the best room in house to see it. Though I may have to take in a Cot or two.

Resp Your
W. F. Brewster

50
Oct 8/83

M G Brewster

re the canvassing of Kansas city

1883-10-08

Delfield This Oct 8/83

Thos A. Edison Esq
New York

Dear Sir

Your favor 1st rec'd & noted. Came up here on acct. indisposition of family. Leave here tomorrow. I will be in St Louis morning of 10th.

Relative to canvass of Kansas City referred to by Major Eaton, my suggestion is to take in a section of City bounded by two streets which make a "flat iron" plat.

This will include best part for lighting.

Col Coats who owns the "Coats House" "Coats" Opera House opposite mill probably

want a plant on the Hill near two buildings mentioned. There can be a Village Plant on hill incorporating Opera House & Hotel & many fine residences

Please send your canvasser direct to W. A. Wright Esq Cash Armour Bros Pkg Co.

This idea is (of course my idea) 100,000 $ Plant.

It would be well to have New Orleans canvassed. Capt Bofinger wants to go at that as soon as St Louis is settled. Bofinger claims he has a richer district in New Orleans than St Louis = Hotels, Theatres & licensed gambling Houses. See Bofinger's letter just today

Yours Sincerely Wm F. Brewer

1883-10-11.

LINDELL HOTEL

CONDUCTED BY LINDELL HOTEL ASSOCIATION.

CHAS. SCUDDER, Pres't
HENRY AMES, V. Pres't
Wm. F. HAINES, Sec'y

St. Louis, Oct 11th 1883

Thos A Edison Esq
65 Fifth Ave New York

My dear Sir

Your favor 5th (is it a duplicate of another I rec'd?) only rec'd today. Please refer to long letter sent to Major Eaton relative to contracting for this Plant.

Rec'd your D/D of today, sent Mr Dyer a letter of introduction to Mr W. H. Winants Cash'r Armours Bro's Pkg Co Kansas City. Also wrote Mr Winants a letter explaining why we now made canvass

I have the honor to be with respect

Yours

Wm. F. Brewster

1883-10-14

LINDELL HOTEL
CONDUCTED BY LINDELL HOTEL ASSOCIATION.
CHAS. SCUDDER, Pres't
HENRY AMES, V. Pres't
Wm. F. HAINES, Secy

St. Louis, Oct 14th 1883

Thomas A. Edison Esq
New York

Dear Sir

Your valued favor 12th inst. duly noted.

As requested in your S/D. I sent a letter to Mr Dyer introducing him to W. H. Vincent Cashr Armour Bros.

Consulted with Capt Robinson today relative to New Orleans canvass. He names a section bounded by North side of Poydras St to North side of Canal St & from River side of Camp St to Lake side of Barone St. This will be the center of operations. It is a small section but very rich being filled with Theaters Clubs & Gambling houses &c. Capt R. thinks it will be richer than the

(2)

1883-10-14

LINDELL HOTEL
CONDUCTED BY LINDELL HOTEL ASSOCIATION.
CHAS. SCUDDER, Pres't
HENRY AMES, V. Pres't
Wm. F. HAINES, Secy

St. Louis, _____ 188_

St Louis Plant.

It will not be necessary to send letters of introductions with Mr Dyer to New Orleans as Capt R. will be here working hard to put this plant through here.

W. H. Robinson of N. O. (a bro of Capt R.) knows of the Enterprise & if it is necessary for Mr Dyer to consult anyone he can see him.

I remain
Very Truly Yours
W. H. Brewster

1883-11-02

OFFICE OF

TODDS & STANLEY MILL FURNISHING CO.

917 & 919 N. 2nd ST.

St. Louis, Mo. Nov. 2d, 1883

Thos. A. Edison, Esq.,

Edison Electric Light Co.

65 5th Avenue, New York.

Dear Sir:--

We have been informed by our friend, Capt. Boffinger, that there has been a Company formed in this City for the erecting of an extensive electric light plant. We take the liberty of inclosing herewith descriptive circular with discounts on pulleys, shaftings etc., and would beg to say that we make the manufacturing of these articles a specialty and have extensive facilities and tools for manufacturing the same.

Yours Truly,

Todds & Stanley Mill Furnishing Co.

Per E. C. Teuscher Sup't.

1883. Electric Light - Thomas A. Edison Construction Department - Stations - New York - Newburgh (D-83-051)

This folder contains correspondence, agreements, and other documents relating to the planning, promotion, and organization of a central station at Newburgh. Much of the correspondence is by Charles T. Hughes, an agent for the Construction Department.

All the documents have been filmed.

36

1883-06-09

UNITED STATES HOTEL
NEWBURGH, N.Y.

June 9th 1888.

Mr. Thomas A. Edison
Dear Sir
I think
I am warranted
in saying that
a Company for
Newburgh composed
of the best men
is certain
Mr Delano
one of the wealthiest
men here has intro-
duced me to some
people who should
be allowed to come
into the Co. and
one man to whom
a friend of Mr

48 June 9th 1883

Delano Wheeler sent me word that he would come attorney of state to the New York and I am going to see him tonight and think I can make it $10,000

Shall keep you informed of any thing that may transpire and shall do my self the pleasure of calling on you early in the week.

Yours very truly

Chas. T. Hughes

1853-06-07

June 29 1888.

Friend Lionel.

Will you send me as many statements of profits and shareholders estimates as you can spare as soon as you can as I find I have but one left, and of course need them as dear. Can hardly say what will come out of this business as some of my people are out of town and although I think I could scrape up about $20,000 with

same trouble. the tail end comes along slowly. I have secured the dambys of the only two doubters who attended my meeting and have promises from both of them to take stock. One would not name the sum now but said I could use his name. The other taken $2,500 or less and maybe more.

You only take that I can raise them up and guess I can but it is like the town up hill work.

The people here are very nice but old fashioned and cautious. Your friend
Charlie

C. T. Hughes.
1883-06-29
Building # 18
Bulletins &c

UNITED STATES HOTEL
NEW ORLEANS

June 29th 1888.

Dear Friend.

Will you send me as many H078 Bulletins as you can spare. I find that it takes long to use up quite a quantity as almost every person visited has to have one and here although I have several of the best people in the City pledged to take them the balance will have to be made up by small subscriptions and is hard work to convince

slowly but surely and is only a matter of time and tact.

I have been to Po'Keepsie and done something to get the people interested but would rather wait until I can go there with the City of Newburgh captured as there is great rivalry between the towns.

Am also about out of Edison pamphlets, the small ones.

Come and see me and you can have a good time

Your friend
Charlie

1883-07-12

UNITED STATES HOTEL
NEW ORLEANS

July 17th 1883.

Friend Insull.

Can you send me the electro plates of the lamp and socket and swinging bracket such as shown in the Edison Pamphlet. The Journal here which is friendly wants to publish an article and the better it is the better for us of course. The other paper is run by a friend of the Gas Press.

and quotes him every day. Things move slowly as some of my men are out of town but I think this mail will see me pretty well along.

Have you any electrotype of Edison & so please have Robbie send them right away before you forget it.

Your friend
Hughes

Miss Martyrdale
Care Atlantic
144 Juniper St

1883-07-16

UNITED STATES HOTEL.
JEFFERSON

July 16th 1883.

Dear Russell.

As you will see by the papers sent today things are quite lively with the Ogre now but I think I have knocked them out.

The statement in the Journal was a little mixed up in the office but it tells pretty much all that is necessary to Dank Kick.

Hall came in on Wednesday I think

with Major Baynton
who will call on the
interest of the stock-
-holder, to see the Central
Station and enquire
of consumers as to
the work as compared
with gas.

If you know
of any parties who
are particularly well
pleased with their light
and bills I wish
you would give their
names so that I can
accidentally call
on them rather than
some dissatisfied
[illegible]

Yours
[illegible]
C. Hardie

Aug 16 1893

77

1883-

UNITED STATES HOTEL,
NEW BUFFALO, N.Y.

Aug 7th 1888.

Mr. Thomas A Edison
Dear Sir.

FILE No.

I am as certain as I can be of anything that the company here is to be and I think the canvass might be commenced right away. One man who owns a brick yard is trying to get a firm of Masons and a carpenter firm to go in with him and put up the building and take their pay in stock, and if you think

1883

UNITED STATES HOTEL,
NEW BUFFALO, N.Y.

1888.

object will do it I think.

I never saw such hard scratching to raise a little money as it is here where plenty of peoples have lots of it. but I know I shall get it.

Had a committee in New York today and everything went off splendidly and they came back delighted They selected their own places to enquire as to the cash as compared

UNITED STATES HOTEL
NEWBURGH, N.Y.

1888.

with gas and were very favorably impressed with the answers given. Have $10,000 promised for the Haverstraw Co by 800 lights and should be glad of an estimate for a plant of that size.

Shall present the petition to the council on Tuesday for this place.

Send it to you for signature at the suggestion of some of the stockholders who thought your name might have some weight with the council. Yours truly Chas. V. Hughes

1883-08-11

UNITED STATES HOTEL
NEW HAMPTON, N.H.

Aug 11th 1883.

Mr. T. A. Edison
Dear Sir.

The Street Committee to whom the matter of ordinance was referred will offer no objection to its passage that we have no building purchased and are not ready to begin work. You see of course the necessity for a canvass being made as soon as possible.

Thus I have found a place for an 100 light machine in

one of the Garzer mills
with Mr. Morris if they
like it and one in
another mill. I hope
you will have the
Tanneries ch. work
here right away.

Yours very truly

Chas. T. Hughes

Mrs. Mr. Jo
Jo. H. Hughes.
Mr. Edward
New York

1883-08-26

UNITED STATES HOTEL
NEW ORLEANS, LA.

Aug 26th 1883.

Mr. Saml. Insull.

Dear Sir

Expected to find mail on my arrival last night from Poughkeepsie but didn't.

Is it not yet done or what is the trouble.

Think it very much might send Koornstraw also as soon as it is completed.

Kind rich Sam

people in Poughkeepsie
but am a little afraid
of it for our brain.
Gas as gas is only
$1.75 per M. is very
good. Everybody is
satisfied and the
people are the slowest
and most sceptical
on earth. Please let
me hear from you
Early. Yours
Charles E. Hughes

Dec 26 1883
Mr. G. Mulholland
N. Amsterdam
map on his counter

1883-09-07

UNITED STATES HOTEL
NEWBURGH, N.Y.

SEP 10

Sept 7 1883.

Mr. T. A. Edison
Dear Sir.
Have pacified the dissatisfied subscribers and think we can depend upon all of them striking with the exception of Bigler who tried to raise the row. There is a very decided objection to him anywhere on the part of quite a number and I think it best to let him drop out

and make up his mind
much in same other
way. Lighted 19 Edison
lamps with a Daft
Machine (which is used
for running a motor) in
the garner mill here
with the best success
and every body who
saw it was delighted.
It is a series machine
and will not light
less than 18 at full
but does the most well
with 19. Think that we
will get some orders
from the Garner Peo-
ples. Yours very truly
Chas. T. Hughes

1883-09-13

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
401	M	Cm	CM	

Received at 852 BROADWAY. Sep 13 1888.

Dated Brockton Mass

To T. A. Edison

65 Fifth Ave

Is Newburg underground or Gole Gline

Sprague

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-09-29

UNITED STATES HOTEL
NEWBURGH, N.Y.

Sept 29 1883

Mr. Samuel Samuel & Bro. Grocers

Dear Sir

Will you send specification & plan of building for Centre St. Station so that I can get some bids on it.

I dont think it would be possible to get as much money as we require unless some such arrangement as I spoke of can be made, and the builders will take their pay in stock.

1883-09-29

UNITED STATES HOTEL
NEWBURGH, N.Y.

1883.

as they will do.

I have pasted over the amount of your estimate and shall let nobody see it and then if their bid is larger than yours they can find no fault.

I have not received the third estimate nor maps.

Please let me hear from you at once.

Yours Truly
Chas. T. Hughes

1883-10-06

UNITED STATES HOTEL
NEWBURGH, N.Y.

OCT 8 1883
ANSWERED

Oct 8 1883 Oct 6 1883.

FILE NO.

Mr. Samuel Sewell.
Dear Sir.

Received letter yesterday A.M. but no Estimates, specification for Building or statement of profits. When can I expect them.

The gas men here have made arrangements with the Citizens Co to use their light and have had the ordinance passed allowing them to use the streets for their

Oct 6/83 56/1
C.T. Huges
acknowleges receipt
of Letter but recd no
Estimate

69 Oct 8/83

1883-10-00

Burges

UNITED STATES HOTEL.

NEW ORLEANS, LA.

Oct 8th 1883.

re ~~specia~~ - specifica & Estimate

Mr. Saml. Isaell.

Dear Sir.

Mr. Tate promised to send me the specification of building and Estimate on Thursday but beyond a letter which purported to contain a statement of profits but didn't I have received nothing. I can't do anything of course without the Estimate and more important still the building specifications and I am afraid the

delay will be fatal.
The gas Co has contract-
-ed with the Commis-
-s for their light.
have had the ordinance
passed giving them
the use of the streets
and are to be ready
to light in two months
and my stockholders
are some of them
weakening rapidly
and unless something
is done soon I may
as well quit.

Want
you to see if you can
hurry your fellows
up

Yours Truly
Chas. T. Hughes

1883-10-09

UNITED STATES HOTEL
NEWBURGH, N.Y.

Oct 9th 1883.

Friend Israel.

Got a letter from you this A.M. I did not expect or desire any other detailed estimate and so told Mr Tate but he said they were all made out so I did not mind upon not having them. but I could do nothing without Map and Building Specifications which did not come. Hope to bring things to a focus soon

1883-10-09

UNITED STATES HOTEL
NEWBURGH, N.Y.

1883.

after I get them Got a message from Ryerson yesterday asking if I could meet him at the Grand Commodore A.M. I wired him that I could not say positively and if Tate made Map & Commodore A.M. I can do it or I shall be quite busy. You had better see him while he is in N.Y.

Your Friend
Charlie

1883-10-15

UNITED STATES HOTEL
NEWBURGH, N.Y.

Hughes in town

Oct 15th 1883.

Mr. Samuel Insull.
Dear Sir.

A meeting for the organizing of the Co, and consideration of the different estimates has been called for Friday Oct 19th 1883 at the Highland Bank in this place at 10 3/4 A.M. If Mr Edison could possibly arrange to attend I think the whole thing can be settled at once. You wish of course

1883-10-15

UNITED STATES HOTEL
NEWBURGH, N.Y.

1883.

be there. I wish you would get Mr Houston to go down the mains in the estimate so as to allow a Co. of $50,000 to do the business for the present.

This would only allow about $33,000 for the station and can be done I should think by cutting out many of the residence lights I don't suppose the

1883-10-15

UNITED STATES HOTEL
NEW ORLEANS

1883.

incorporators will accept such an estimate but it would be a good plan to be prepared to meet them on the basis first proposed. Be sure and bring this estimate with you. Let me hear from you soon as to what I may expect and oblige

Yours very truly
Chas. T. Hughes

1883-10-19

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
450	Ga	Dy	10 Cl

Received at 852 BROADWAY.

Dated Fishkill Landing NY 19 Oct 19 1888.

To Tate C/o Edison

65 - 5 Ave

Newburgh contract assured send my personal letters to Johnsons office

Insull

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-25

Form. No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
G 30 ny	Ja	Da	10 paid

Received at 1 30 pm Oct 25 1888.

Dated Newburgh NY 25

To Saml Insull Care A Stuart N W. Cor 6th & Vine St Phila

Meeting to be in session all afternoon think result satisfactory

Tate

Form No. 1.

1883-10-25

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
741	Cor	Ad	

Received at ~~791 BROADWAY~~ 852 BROADWAY Oct 25 1882.

Dated Newburgh NY

To Randolph Geare Edison
65 Fifth Ave

Cant get home till late
tonight wire anything important.
Pate

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-26

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
443	Cor	Ad	4 pm

Received at 852 BROADWAY. Oct 26 1888.

Dated Harrisburg Pa

To Pate Cr Edison 65 5th Ave

Have no news about Newburgh
if not closed have Kinnear
Canal tube order send letter
My house giving details
Geare

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-29

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

3 50

NUMBER	SENT BY	REC'D BY	CHECK
344	NA	NV	14 pd

Received at 852 BROADWAY.

Dated Newburgh Oct 29 1888.

To Tatt

Mr. Edison

65-5 ave

Newburg Contract signed Leo Kruesz

Henry Stubes shall be at office

tonight after dinner

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. Insull

1883-10-29

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Oct 29 1883

J. R. Campbell Esq

Please make a correct copy of this estimate on same kind of form - They have destroyed the columns for order numbers -

Tate

1883-10-29

MEMORANDUM OF AGREEMENT made this 28th. day of October, 1883, between the EDISON ELECTRIC ILLUMINATING COMPANY of Newburgh, hereinafter called the party of the first part, and THOMAS A. EDISON, of the City, County and State of New York, hereinafter called the party of the second part.

The party of the second part upon receiving permission from the Edison Electric Light Company of New York, agrees to furnish and install at Newburgh, County of Orange, State of New York, for the party of the first part, an Edison Electric Light Central Station Plant necessary to furnish a maximum of 1,000 lights of ten candles each over a system of underground conductors, as per the map hereunto annexed (marked Exhibit A and showing the feeders and conductors in red lines) for the sum of Thirty Eight Thousand Dollars according to statement of labor and material hereunto annexed (marked Exhibit B).

In consideration of the party of the second part undertaking to furnish and install said plant, the party of the first part hereby agrees to pay the party of the second part as follows:- Twenty Five per centum of the before named Thirty Eight Thousand Dollars on November 15th. 1883, Fifty per centum of said amount when the installation is ready to supply light, and the remaining Twenty Five per centum when the installation has been in condition to supply light thirty days.

It is further agreed that the title of the property covered by this contract does not pass from the party of the second part to the party of the first part until all the terms of payment

1883-10-29

herein provided for shall have been complied with.

The party of the second part further agrees to use due diligence in putting into practical operation the said installation and to do all work in connection therewith in the best and most workmanlike manner and in compliance with the requirements of the Engineering Department of the Edison Electric Light Company of New York.

This Agreement shall not be in force until the Edison Electric Light Company execute and deliver to the party of the first part the agreement and license this day signed by said party of the first part.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals the day and year first above written.

Seal

The Edison Electric Illuminating Company of Newburgh

by (Signed) Robert Rogers, President.

Attest, M. C. Belknap, Secty.

Witness to signature of Thomas A. Edison,

(Signed) Thomas A. Edison.

A. O. Tate.

I hereby certify that the license contract between the Newburgh Co. and the Edison Electric Light Co. has been executed in due form.

(Signed) F. S. Hastings,

Treas.

Form No. 1.

1883-10-29

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
74.	W	Sa	10 Paid

Received at 1047a Oct 29 1888.

Dated New York 29

To Saml Insull

Highland Nat Bank

Aysons people say they can complete Newburgh order this week

Pate

Form No. 1.

1883-11-12

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
77	Ja	wy	20 paid

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Mon 12 1883

Dated Newburgh Nov 12

To Saml Insull

65 5. are very

anxious to see you and Mrs Anderson

at your office this eight P.M.

Please as I go to Fall River

tonight

A D Kirk

1883-11-12

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, 188

[illegible]

Dear Sir

[illegible]

[illegible]

69

Nov 12/83
In re Stevens
[illegible]
Rich

Rich

Geo Gromer

0 or 10 6 of ~~the~~
~~1000~~ plat. Ner Coin
for [illegible]

1883-11-13

OFFICE OF

THE HOMER RAMSDELL TRANSPORTATION COMPANY,

HOMER RAMSDELL, PRES'T.
JAS. A. F. RAMSDELL, TREAS.
H. S. RAMSDELL, SEC'Y.

Newburgh, N. Y., Nov 13 1883

H. A. Rich Esq
Dear Sir
We will carry all your Machinery and Everything Connected with your Electric Light to this City on our Boats during Navigation at 10¢ per 100# We are located Close by your Station and will give all facilities for unboxing and loading your goods
Very Truly
The Homer Ramsdell Trans Co

1883-11-19

OFFICE OF

The Edison Electric Illuminating Company

OF NEWBURGH, N. Y.

Newburgh, N. Y., Nov. 19, 1883

Mr Thomas A Edison
in 65 Fifth Avenue
New York City

Dear Sir.

I have this day received the License duly executed by the New York Co.

Herewith I send Nos 4 & 5 Coupons $9500 to your order being 25% due you by terms of contract dated Oct 29 1883. Please send receipt for the same.

With reference to the building I would say that the probabilities are that it will be covered in in about thirty days unless inclement weather interferes.

I would suggest that it would be cheaper and better for you to do the digging required for laying the mains before the ground becomes frozen.

Yours truly

H C Ostrander Treas

1883-11-19

IN REPLY TO YOURS OF

Newburgh, N.Y. Nov. 19th 1883.

Mr. C.T. Hughes,
Morgan House,
Poughkeepsie.

Dear Sir;

I notice nearly directly my house on Montgomery St. in this city. They are about erecting a building for your Electric Light here. I have the lower Floor in the nice brick just erected by Mr John Hellow, with whom you were talking about introducing it into his houses here. he owns over 70 House here; We have 2 very nice rooms, that we could spare, and as we have no children you will see our family is small. The thought struck me, that perhaps you might possibly have 2 or more men come in 2 or 3 weeks here to set the apparatus in motion. and of course they might like a nice boarding place, as our House is nearly opposite the plant and being all new and nice, with Hot & Cold water and use of Bath room, and a larger and nicer room than any hotel here. We could give them first class board for 5.00 per week

I think I told you in the summer that I was going to move here soon as the house was ready. I myself have boarded here for 2 years and paid 6 dollars per week, but as I have my wife here now and we have these two rooms to spare I did not think it amiss to write you as some people very often prefer board in a private family to that of a Hotel. If such is the case with any men in your employ we should endeavor to make them feel at home with us. Our house is entirely new, roomy. And the board would be first class. Should be glad to hear from you.

Awaiting your reply

I remain

Yours Respectfully

Charles W. Forbush

Mr Chadborn Coldwell Mfg Co

Lock Drawer 38

Newburgh

N.Y.

Dear Sir

Received your great favor and enclosed check for $ drawed to my order. If you need any more boarders I shall be happy to have them board with you.

Yours

Charles

Newburgh N.Y. Oct 17 1882

C. Beckwith Esq
Enclosed a letter to Mr Forbush
as reference
Board for men
Please return

(1283)

57 Sunday

UNITED STATES HOTEL
NEWBURGH, N.Y.

re Estimate

File

Sunday 1883.

Friend Isaac.

Got your letter last night and was very sorry to learn that the prospect for estimate was so slim as I think it very essential that it should be submitted at once before they get cold. Have 8 firms in each subscribed besides the man who agrees to put up building. For which I wish you would send specifications. Have posted over your bid in the estimates for

building and if his bid should be higher he will no doubt take stock anyway.

Now all that is necessary is to show a good dividend to be made soon and for this I think a statement of profits for Newburgh issued by desirable. Mr Rogers was down & invite me to ride this P.M. in the week through in town and all the nice people are my friends. Let me hear from you early on these matters.

Yours friend
Charles

1883. Electric Light - Thomas A. Edison Construction Department - Stations - New York - Utica (D-83-052)

This folder contains correspondence and other documents relating to the attempt to establish a central station at Utica. Included also is a street diagram of Utica. Much of the correspondence is by Paul D. Dyer, canvasser, and by A. B. Johnson, secretary of the Edison Electric Illuminating Company of Utica.

All the documents have been filmed.

1883-04-11

Office of GROVE & BAILEY, Apl. 11. 83

Job Printers, & Publishers of the

Utica Daily Observer,

Observer Buildings,

UTICA, N.Y., Apl 11 1883

Utica Daily Observer, Twelve cents per week.

Weekly Observer, Two dollars in advance.

Dear Friend

Charlie Benton has been here and I have put him on to the people that will probably take a hand in — including A D Barber the well known Utican who "walks and talks" at Albany while the Legislature is in session.

The present system being tested here has "an aqueduct in its a — s" as the Irish girl said in Rome. She was applying to

Mrs Brown for a situation
and when asked why she
left Mrs Leynch said
that she was told that she
had "an aqueduct in her
a — s" When Mrs Brown
asked Mrs Leynch about
Bridget she said she was
slow but good and on
learning she had expressed
the opinion that she was
"inadequate to the task!"
So with this are system
it dont fill the bill.
I hope to be able to
secure your company
here and that we shall
see you when you come
to Utica. Send me some
of your pamphlets

Yours Truly

J. J. O'Lanagan

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

1883-06-07 18

~~NEW YORK~~ Utica June 7 1883

Mr. Insull:

I made a careful investigation of all the ins & outways of the business section of this place this mng, also located the residences that consume the most light.

An Estimate of light taken at this season will be the minimum consumption.

It is perfectly safe to say that two more jets will be burning 2 hours from Sept 15 to March 15 than are burned nightly now.

I met Mr C.B. Johnson this mng. He had got time to pen an outline copy of what he said. Will find it to my advantage to visit his office occasionally.

The district selected by the Company here to light from a station, extends three quarters of a mile in every direction

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

N 1883-06-07

NEW YORK 188

from the prospective location of the Station, & contains many barren spots. To estimate a house in this area would necessitate a tramp of hundreds of miles.

I haven't the authority to use the time necessary to cover this ground, so will stick to Mr Edisons directions minutely.

Will take the section where consumption will be greatest for most hours — will go beyond this in a circumscribed area to include best residences; and will also take in a street for any distance beyond the selected area where the houses are all first class & continuous. The secret area I might to estimate at my present knowledge will contain about 175 block facings.

It is manifestly impossible

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

3

1883.06.07.

NEW YORK.....188

to cover this ground & be in Erie Tuesday.

I can finish Wednesday night & mail full report from Erie Thursday.

Please telegraph me whether I will finish Utica or not before I go to Erie.

Will write more fully Sunday

Hurriedly

Paul R. Dyer

Grand Central Hotel,

finish Utica

34

1883-06-09

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

Utica ~~NEW YORK~~ June 9 1883

Mr Insull:

I rec'd telegram at 2 P.M. and letter two hrs later.

I met Mr Johnson this morning by appointment & showed him my work, about a dozen sheets of which I have copied in good form.

He seemed much better pleased.

Our trouble is a number of people who live outside the greatest possible limit want the light right off.

The local company seem anxious to commence work immediately.

It would be an absolute waste of time to canvass for connections. Three fourths of the business houses in the area I have selected would take it to-morrow.

The gas here must have been either very high or very poor,

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

2

1883-06-09.

NEW YORK 188

for in the majority of places where I have found lamps used, the lamps were set in the gas fixtures.

A plant of 60 arc lights was installed here some time ago; only 12 in all are in use now.

About a month ago they went out about 8 o'clock, & on Saturday night, when all the best houses are open.

I have been questioned by a number of business men about the price of the Edison light. Will it be as cheap as gas, seems to be the only consideration.

By the telegram I am to take a beat I can get over in half an hour; well, at this rate it will take me exactly five days to finish it: or next Friday night.

BK

1883-06-09

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK 188

I will finish one half of the town to night and will copy off all I have done so far to-morrow.

The following is the list you gave me

Utica. N.Y.
A. B. Johnson

Erie. Pa
Clark

Lockport N.Y.
Major C. Wheeler Jr

Auburn N.Y.
B. Vanhorn Jr

Syracuse N.Y.
Geo W. Bruce (Journal)

Respectfully
Paul N. Dyer

THOMAS
No. 65

June 11th. /1883

Paul D. Dyer, Esq.

Grand Central Hotel,

Utica, N. Y.

Dear Sir:-

I have your favor of the 6th. inst., and I am very glad that you keep us so well advised of your movements. You have nothing to do with canvassing for consumers, and as I have said before you must not listen to what the local people have got to say about you or your business. Neither should you say anything about the probable price of the electric light. In all probability it will be the same cost as gas is, except we supply a better light for the same money. But this is for your information and if any one asks questions about it, the best way for you to do is simply to say that they must wait until the local company commences operations. Just work away as hard as you can, as the towns are piling up terribly and keep me pushed.

Very truly yours,

S. Insull,

per G.

1883-06-08

. EDISON,
TH AVENUE.

NEW YORK June 8 1883

Mr Insull:

I recd the blue prints this mrg and my head aches from studying them.

Some of the numbers are too indistinct to be made out, and in three cases, two adjacent blocks have the same number.

Some of the blocks I have selected to canvass have no number on the prints & in several instances the blocks themselves are absent.

The blue prints in this form are misleading.

Dont you think a plain print of the city, each block numbered arbitrarily at the office, would be better?

Where two blocks have the same no, I will mark one (') prime: and will letter the blocks that have no number

You must take such a
beat that you can
return every 30 minutes
otherwise Canvass no good
better get a Local Map -
I did not order the
Blue prints

E

EDISON,
TH AVENUE.

NEW YORK 188

and those I cant make out.
I am making out first-rate
Last night (Thursday) I made
estimates on 300 separate houses
travelling six miles, not including
trips to second & third floors.
Took the nos + business of
these houses down during the
afternoon, and made very careful
notes all along the line.
This circuit was too large, for be-
-fore I was ready to start the second
time the evening was already gone.
Put in twenty houses yesterday
& will have to make twenty
more to-day.
Mr Johnson and the interested
people here stigmatize the method
I am pursuing as "no good"
I can only tell them I am
following directions.
Please let Mr Dodge see this
Yours Respl
P. D. Dyer.

he must take such a
that you can
30 minutes
no good,
map

1883-06-12

Grand Central Hotel,
CORNER WHITESBORO AND DIVISION STREETS,
UTICA, N. Y.
C. A. LONG, Proprietor.
W. W. LONG, Manager.

6.20 ve

Utica, N. Y., June 12 1883

Mr Insull:

Have just rec'd your favor of the 11 inst: I will keep your suggestions in mind.

I am doing splendidly. Spare no effort to get at an exact estimate in every instance.

It is necessary to do considerable walking to get at a correct estimate on Churches, Opera houses, Club houses, Halls &c but I have succeeded in every instance.

As I said I will finish up completely Thursday night, & Friday mornig will send all papers to N.Y.

43.

June 12, 1883

Paul Dyer

I have made the fullest notes, so there can be no possible misunderstanding, and I feel confident the estimate will come up to the required standard.

Utica, N.Y.

This is a splended field for a Central Station Plant.

I have to tell men every day, who stop me on the street, that I have no time to talk, & refer them to the local Co.

I find out every night, on returning to the Hotel that some well known Citizen has called for that "Electric Light Man".

The Preit of the Gas Co here is also Preit of the Arc Light Co.

The Arc Light has been a fizzle. This is a significant fact.

Yours Respt'y

Paul Dyer

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
385	Dg	R	23 JK 35

Received at 791 BROADWAY. 852 BROADWAY. June 13 1882

Dated Utica NY 13

To T A Edison 65 5 ave ny

Johnson insists on forty block faces more right different sts all residences outside of area can local company estimate and send report. Paul D Ryder

Grand Central Hotel.

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
170	he	852 BROADWAY Zd	120

Received at 791 BROADWAY. July 16 1882

Dated, Albany 16

To T A Edison 65 fifth av

Mailed description of ten lots yesterday telegraph which will suit

A B Johnson

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-07-16

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
N4 70	Xo	F	4 Paid

2 16 PM July 16 1888.

Received at

Dated New York

To AB Johnson

Will answer leave tonight

Thos A Edison

1883-07-17

Utica July 17. 1883

Thomas A. Edison Esq
No 65 5th Ave. N. York

Dear Sir:

Yours of the 16th inst. is rec'd.

The lot you have selected is the only one, about which there is a doubt of our being able to get it, the owners having changed their minds we

here but will inform you tomorrow July 18.

Your telegram misled us to suppose you would be here this morning - I enclose it to you, that you may see on what our hopes were based - It must be a mistake of the Tel. Office.

Yours truly
A. J. Johnson
Utica.

A. J. Johnson
Utica
July 17/86

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
1.17	N.J.N.	10 Park	

Received at 791 BROADWAY, July 18 1883

Dated Utica Jly 18

Thomas A Edison Esq

65 Fifth Ave

We Cant get Lot Six telegraph the Next best Lot

A B Johnson

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

44 1883-07-18
A. B. Johnson
re lot No 1

Utica July 18. 1883

T. A. Edison Esq
No. 65 5th Ave. N. York.

My Dear Sir:

Your telegram selecting lot No. 1. is rec'd. The lot is 40×100 and we have taken steps to secure it, our people do not think it is large enough for our purposes and will at once try to get the ad=

=joining now occupied as a livery stable - our people think we ought to have room to store a large amount of Coal and space for a drive way or passage to the rear &c. Our Common Council meet on the 20th When we expect consent to place our wires, we shall then be ready to move as rapidly as you will permit us to.

Yours Truly
A. B. Johnson

1883-07-19

$5500 is a rather large sum to pay for a lot you people there must be rolling in wealth, I have an idea that we should not pay over $2000 for all the what = Thos A. Edison Esq E. 1883

My Dear Sir. E

The Real Est. Agent whom we employed to procure refusals of lots for us reports today that lot No. 1. turns out to be only 30 x 80 and that we can not buy more land on either side of it. So we suppose it will

not answer - I am now engaged personally in negotiating for the Post St. lot first suggested - The owners have not only the lot reported to you but an L that fronts on Charlotte St. The whole being about ~~[illegible] sq. feet~~ I have offered $5500 for the whole and hope to get it at not much above that figure. and in

1883-07-19

the meantime am looking for other and better location. am promised an answer at the Post Charlotte Ft Opper tomorrow. I am mortified at the carelessness of our agent.

Yours truly

A. B. Robinson

1883-07-20

Utica July 20th 1883

Thos A. Edison Esq

Dear Sir

Since writing you, property has been offered us on Rome Street & the Canal.

Rome St. is a short street between Fayette & the canal & between State & Cornelia Sts.

It is a large property, and the buildings are first class of their kind. The owners are desirous of selling any portion and if any of it would answer can be bought cheap.

The foundry 80 X 90 can be bought

for about $10.000.

While this is outside of your radius we offer it as it has been submitted to us.

Very truly &c

P. N. Crouse as Prest

July 20 1883

P. N. Crouse

Re- Buying our

Life Policy in Equitable

Mutual Insurance

1883-07-30

Ans'd

letter July 30 1883

T. A. Edison Esq

No 65 5th Ave. N. York

My Dear Sir:

Your telegram was received at 3.10 this P.M. about 5 minutes after we had bought Lot one. It is a good property, and I am sure you would think so if you could see it.

44.

July 30th 1883

A. B. Johnson

re- the lot for
Central Station
at Utica

Yours truly
A. B. Johnson
Utica N.Y.

Copy.

1552 0870

10th. August, 1883.

A. B. Johnson, Esq.

Secretary,

Edison Electric Illuminating Co.

Utica, N. Y.

Dear Sir:-

I enclose you herewith estimate for the erection of a central station plant at Utica, amounting to $72,836. I also enclose you herewith blue print on which is marked in red lines where the street mains will run.

This estimate includes not only the equipment of the central station and the street mains and feeders, but also enough service tubing to make connections between the mains and houses of fifty consumers. And further all expenses in connection with running the central station for a period of thirty days after the station is started, including all supplies, and wages of permanent employees and expert to teach those employees, so that if you decide to give me the contract your station will be run for you thirty days and you will be insured employees capable of running it after our men leave, owing to the instruction given by my experts.

This estimate does not cover the wiring of houses, but it does cover the expenses of an expert, who will teach a local man to do the work. The exact method of dealing with this work will be explained to you by myself the next time I see you.

Before signing a contract with your Company for the performance of the work, I should ~~be~~ require to be satisfied that money, sufficient to meet payments due me under the contract, is in the Treasury of your Company, or else the personal guarantee of three members of your Company acceptable to myself, in order to insure me against loss, inasmuch as the material involved, and which I will be obliged to carry for a considerable time, will amount to a very large sum. If your Company does not close a contract with me within a period of thirty days from this date, the enclosed estimate must be considered as withdrawn.

I think the justification for the delay in forwarding you an estimate is in the fact that I have been able, by going over the whole matter in a most exhaustive manner, to reduce the estimate about $11,000.

The day you saw Mr. Insull, we effected a reduction of $8,000., bringing the estimate down to about $75,000., the amount I advised you of. Since I wrote you we have managed to effect a further reduction of about $3,000. These reductions have been made mainly by a re-arrangement of the underground system. So that you see the delay, since the position of the lot was determined on, has been solely in the interest of your Company.

Yours truly,

(Signed.) Thos. A. Edison.

P.S. Blue print of the ground plan of the central station will be mailed by to-night's mail.

Copy.

1883-08-10

10th. August, 1883.

A. B. Johnson, Esq.

Edison Electric Ill. Co.

Utica, N. Y.

Dear Sir:-:

In my letter of even date I find that I have omitted to state that in case your Company close a contract with me, I shall require twenty five per cent (25 o/o) of the amount of the contract, on the signing of the agreement. Fifty per cent (50 o/o) when the installation is ready to supply light and twenty five per cent when the installation has been ready to supply light thirty days.

Yours truly,

(Signed) Thos. A. Edison.

1883-08-15 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, Aug 15th 1883

Mr T A Edison

Sir

In the plan of street I have place boilers close to corner of Building so that they would deliver as directly as possible into the street. If placed as shown on dotted lines it would be necessary to carry a long line of tunnel thus increasing the expense for more than the extra length of steam pipe to be used in present plan

Yours &c
A R Shedd

Mr Johnson - This will answer one of the questions asked at the meeting yesterday Edison

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
175.	B. L.	Wlaid		174

Received at 791 BROADWAY.

Dated Utica Ny 24 Aug 1882 -?

To Thos. A. Edison 65 - 5 ave

Your letter to Mr Johnson recd
wrote Wednesday to May Eaton
Dr Crouse

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.
DIRECT WIRES.

1883-09-07

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Sept. 7th, 1883

S. B. Eaton, Esq. Prest.

Edison Electric Light Co.

City.

E. P.

Dear Sir:-

Referring to my interview with you as to the Utica contract and your ~~recommendation of~~ asking my opinion as to the acceptance of the proposition of the Utica Directors to make a contract with me to put up the plant there for $37,000., the balance of my estimate (about $6,000) to be paid by the Light Company, I wish to place on record my objection to this course being pursued in view of the fact that you propose bringing the matter before the Executive Committee for final settlement.

The proposed arrangement would be a good one for the "Construction Department", but a very objectionable one, in my opinion, for the Light Company to accept.

I consider it far better to allow the Utica Company to fall through, rather than have the Light Company accept such a proposal which would most certainly prejudice their future business, whereas the failure to close the Utica contract this Fall would have, under the worst circumstances, but a temporary effect on our business.

Yours truly,

Thos A Edison

1883-09-12

Utica Sept. 18 1883

E. H. Johnson Esq

My Dear Sir: OK Edson

Replying to yours of the 17th inst. Mr Painter informed me substantially of the conclusions you had arrived at. Personally I was in favor of accepting - but at a meeting of our people yesterday - it was thought we had better wait until next season before undertaking to instal in our plant. We shall acquaint our Co. of your intention and be all ready to proceed in the Spring.

Resty Yours

A. B. Johnson

Utica.

MANUFACTURING PROPERTY
FOR SALE.

The Works of the UTICA STEAM ENGINE Co., situated in the City of Utica, N. Y., covering about an acre and a half of land. The buildings are of brick, and built in the most substantial manner, and comprise

One two-story Building,	**(Machine Shop,)**	**45×128**	**feet.**
" " " "	"	**34×175**	"
" **Building,**	**(Boiler Shop,)** - -	**70×120**	"
" "	**(Foundry,)** - -	**80×90**	"
" "	**(Steam Forge,)** - -	**40×80**	"
" "	**(Smith's Shop,)** - -	**25×75**	"

With Engine Room, Boiler Room, &c.

The Boiler Shop, Foundry and Steam Forge are high one-story buildings, with no columns in them, the roofs being strongly trussed. There are ample yards adjoining the buildings for the storage of coal and other materials required in manufacturing.

The premises are located in nearly the centre of the city on a paved street, (Fayette) with gas and water in the buildings they also have frontage on two other streets, (Rome and Cornelia,) and in the rear have a dockage of 380 feet on the Erie Canal, with ample docks for delivery of coal and other materials.

Utica is located in Central New York, in the midst of a rich agricultural community, where labor can be secured at the lowest rates, and the expense of living is moderate. It is on the New York Central and Hudson River Railroad and the Erie Canal. The Delaware, Lackawanna and Western Railroad, as well as the Delaware and Hudson Canal Co., have roads running to the city, making direct connections with the Pennsylvania Coal Regions and with roads running to all parts of Pennsylvania, the West and South. Utica is the coal depot of these roads for the centre of New York State. The Utica and Black River Railroad runs north from the city, making direct connections with the lumber and iron regions of Northern New York and Canada.

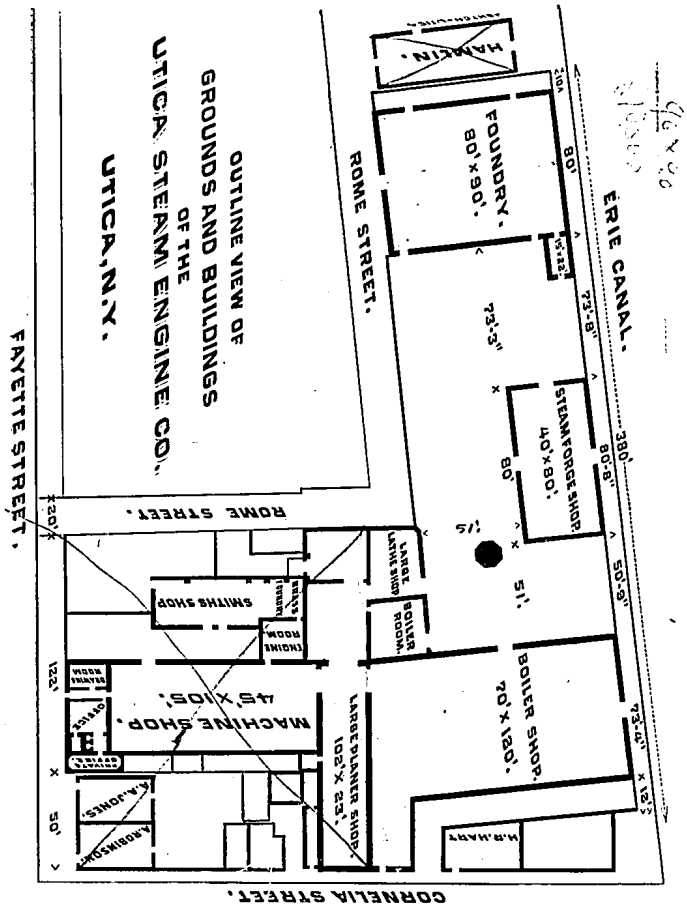
Blast Furnaces are located near the city where the best quality of Iron can be obtained at the lowest rates, and it is the best location in the State for iron or other manufactures. Large cotton and woolen mills, stove and other manufactories are located in the city and have been unusually successful.

These works can be readily adapted to any line of manufacturing, such as stove works, rolling mills, cotton or woolen factories, car shops, &c., &c., and will be sold at a great reduction from their original cost and appraised value. The larger portion of the purchase money can remain on bond and mortgage for a term of years if desired.

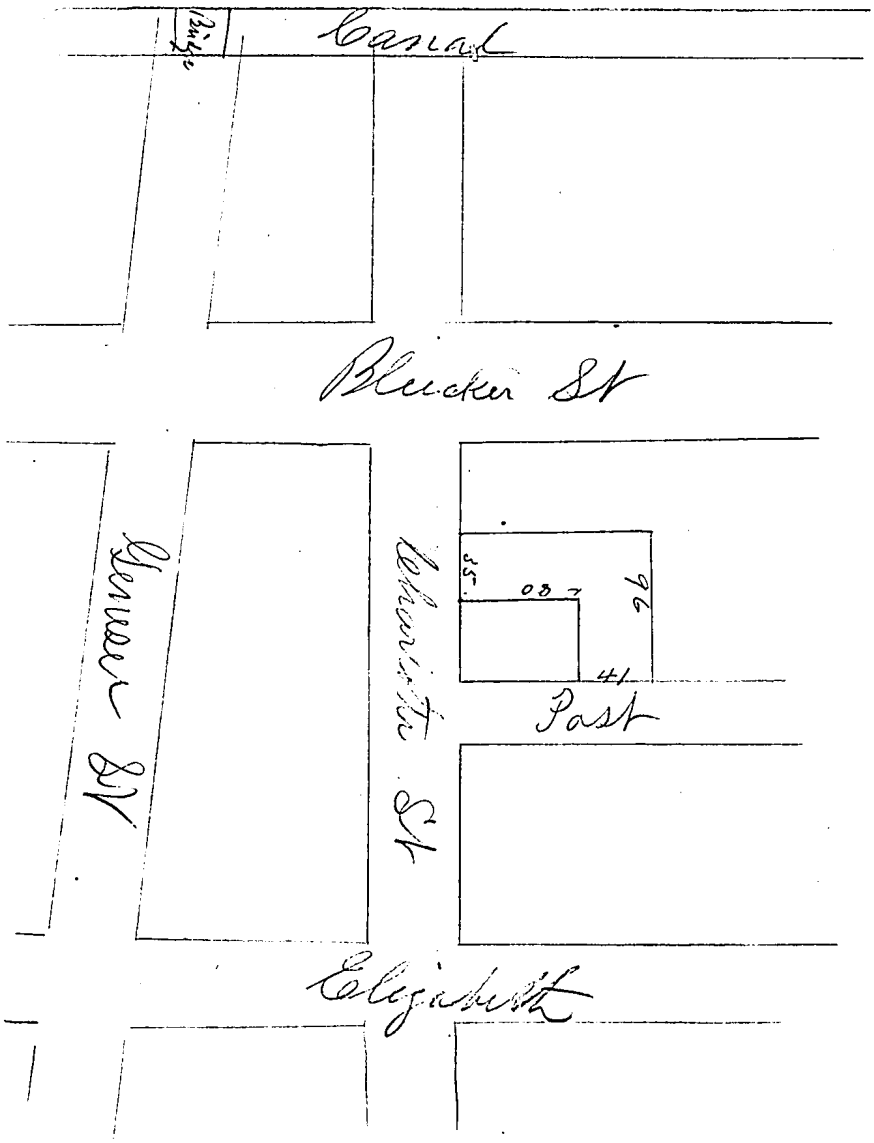
For further particulars address

JAMES F. MANN, Receiver,

Utica, N. Y.



(1853)


Canal
Blucker St
Genesee St
Columbia St
Elizabeth
Post
25
08
96
41

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Ohio - General (D-83-053)

This folder contains correspondence, reports, and other documents relating to the establishment of central stations in Ohio. Much of the material deals with the organization and operation of the Ohio Edison Electric Installation Company. Incorporated in 1883 in Covington, Kentucky and headquartered in Cincinnati, Ohio, this company acted as an agent between Edison and the local Ohio companies. Also included in this folder are other documents that pertain to more than one Ohio town or more than one local company. Much of the correspondence is by Archibald B. Stuart, secretary of the Ohio Edison Electric Installation Company.

All documents have been filmed except for duplicate copies of selected documents.

1883-06-27

T. D. FORM 5.

BALTIMORE AND OHIO TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS Messages only on conditions, limiting its liability, which have been assented to by the sender of the following message.
Errors can be guarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delays in transmission or delivery of UNREPEATED MESSAGES.
This Message is an UNREPEATED MESSAGE, and is delivered by request of the sender under the conditions named above.
GEO. P. FRIOM, President. R. STEWART, Sup't.

NUMBER.	SENT BY	RECD BY	TIME.		CHECK.
14	Ja	R	205	17 Rd 61	2Ex

Dated Cincinnati O 27 Rec'd at 101 EAST 14TH ST.
To T. A. Edison June 27 1883
65 Fifth Ave
Still hammering Contract two
sessions daily shall stay till
Contract settled at executed possibly
tonight
Eaton Burnett House

Read the Notice at the Top.

1883-06-27

T. D. Form 4. **HALF-RATE MESSAGE.**

BALTIMORE & OHIO TELEGRAPH COMPANY.

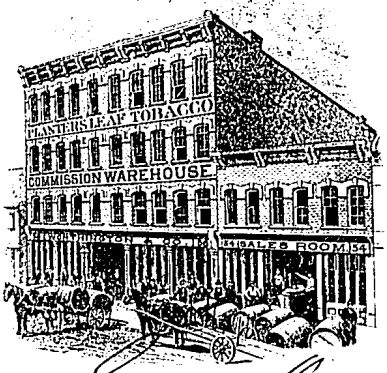
This Company TRANSMITS and DELIVERS Messages only on conditions, limiting its liability, which have been assented to by the sender of the following message.
Errors can be guarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delays in transmission or delivery of UNREPEATED MESSAGES.
This message is an UNREPEATED MESSAGE and is delivered by request of the sender under the conditions named above.
R. STEWART Supt.

NUMBER.	SENT BY.	TIME.	RECEIVED BY.	CHECK.
21	Kn	1011	O 15 Rd 2 01	

Dated Cincinnati O 27 Rec'd at SINCLAIR HOUSE B'WAY & 8TH ST. 188
To T A Edison
65 Fifth ave
Five hour Session closed this
evening & Contract signed reach
home Friday forenoon at eleven
2 B E

READ THE NOTICE AT THE TOP.

1888-07-17.



H. WORTHINGTON. A. STUART.

OFFICE OF

PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos. 54, 56 AND 58 WEST FRONT STREET.

Cincinnati, July 17th 1888

Samuel Insull Esq
New York

Dear Sir

Please send me a photograph of a dynamo and also one of Hon. Thos A Edison. I am looking for something appropriate for our stock certificates

Yours truly

A Stuart

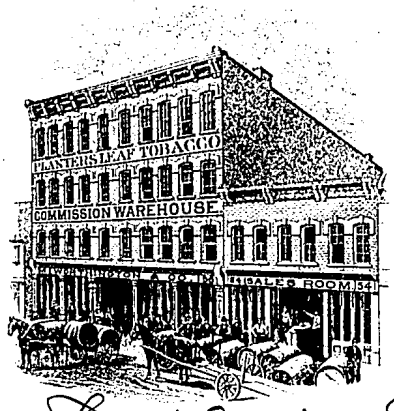
P.S.

Such as you can send by mail will do.

1883-07-19.

H. WORTHINGTON. A. STUART.

OFFICE OF



PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos. 54, 56 AND 58 WEST FRONT STREET.

Cincinnati, July 19 1883

Thos A Edison Esq
New York

Dear Sir — On my return I went at once to Hamilton to look over the ground and find it a good town with all the desirable alley ways necessary.

I saw Mr Dyer and requested him to go to Georgetown when he finished Hamilton, after that we want him to go to Lima, London, Marietta, Pickway Ravena, Tiffin, Urbana and Washington.

I will be glad if I can be kept posted where he is from time to time, We are very busy making office arrangements etc. We will have to have an office or Exhibition plant in a few days and hope you will see that the Isolated folks let us have it in good shape as low down as possible —

The "Excelsior" Company are moving Heaven & Earth to get in their light here and are getting some of them in using "Maxim" lamps —

Mr Insull I have not

received the letter you promised to write me
Send it along.

Yours Respectfully

J. Stuart Gray

Enclosure: Letter
dated June 19, 1863
48 Worth Ave
Kenny Ohio
Concerning

1883-07-21

639-Y.

OHIO EDISON ELECTRIC ILLUMINATING CO--CINCINNATI HAMILTON CO.OHIO.
H.H.HOFFMAN PREST. 60 W. FRONT ST.
ARCHIBALD STUART SECY. JAMES SPILLMAN TREAS. STOCKHOLDERS & DIRECTORS
SAME F.A.PRAGUE C.G.WALLACE HENRY & H.S.WORTHINGTON.

A STOCK COMPANY UNDER KENTUCKY LAWS INCORPORATED JUNE 6-1883 WITH AN AUTHORIZED CAPITAL OF 250,000 DOLS. IN SHARES OF 100 DOLS. EACH ITS SECY STATES: ITS STOCK IS NOW SUBSCRIBED AND TEN PER CENT OF THE AMOUNT PAID IN IN CASH AND IT OWES NOTHING. IT IS LIMITED BY ITS CHARTER AN ITS POWER TO CONTRACT ANY INDEBTEDNESS EXCEEDING 50,000 DOLS. AND NO SINGLE INDEBTEDNESS EXCEEDING 5,000 DOLS. CAN BE CONTRACTED WITHOUT A 3-4 VOTE OF ITS STOCK-HOLDERS. ITS PRESENT STOCK-HOLDERS WITHOUT ONE OR TWO EXCEPTIONS ARE WEALTHY, INFLUENTIAL BUSINESS MEN OF THIS CITY AND COVINGTON KY AND THEIR REPUTATIONS ARE SAID TO BE FIRST CLASS IN ALL RESPECTS.

JULY 21-1883.

BRADSTREET'S

To THE BRADSTREET COMPANY.

The correctness of the above statement is guaranteed, but having been obtained by us, good faith and diligence are used in its compilation, it is transmitted to you in confidence for your exclusive use and benefit, and in consideration of the mutual exchange between us.

Respectfully,

[38]

OHIO EDISON ELECTRIC INSTALLATION CO. 3-Y
WAS INCORPORATED HERE JUNE 9-1888 BUT ITS HEADQUARTERS ARE AT
CINCINNATI OHIO WHERE SEE FULL REPORT JULY 31-1888

Cincinnati, 188

To

The correctness of this report is not guaranteed, but having been obtained by us in good faith from authorities deemed reliable—it is transmitted to you in strict confidence for your exclusive use and benefit, and in accordance with the terms of the contract existing between us.

Respectfully,

[38] THE BRADSTREET COMPANY.

BRADSTREET

1888-07-2

1883-07-23

Mr. Hutchinson,

Please read the enclosed letter from Mr. Stuart, and see Mr. Edison about exhibition plant for the Ohio Syndicate's Cincinnati office.

S. Insull,

July 26th. 1883. per G!

g

[ENCLOSURE]

1883-07-23

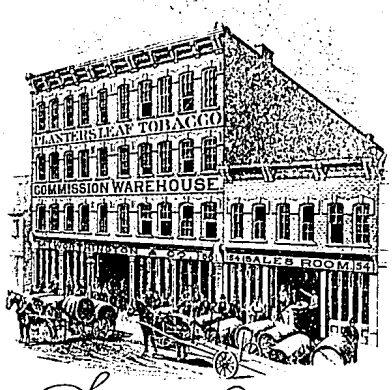
H. WORTHINGTON. A. STUART.

OFFICE OF

PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos 54, 56 AND 58 WEST FRONT STREET.



Cincinnati, July 23 1883

Thos A Edison Esq,
Dear Sir

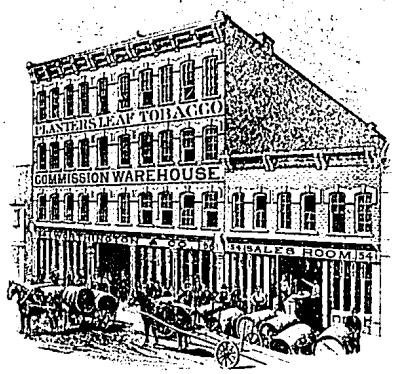
Mr Byron is just returned from Hamilton & informs me that he has sent in his report to you, our idea is to put in a 1600 light plant. As soon as possible, the town will doubtless justify a larger one, but we think it best to make a sure shot on the paying and commercial qualities of the first plant. If it is at all practicable would like you to send us at once a rough estimate of what this plant will cost. Such rough estimate will not be in any way binding. We simply want an idea, so we can get to work at it —

I have just sent in our order for our exhibit plant. I find it is going to cost like "blazes" — We are fitting up a nice office in the most prominent part of our city, it will create a sensation and no doubt attract newspaper comment please tell a little time and intimate to the Isolated folks, to make the figures on that plant as low as possible, but to be sure

[ENCLOSURE]

1883-07-23

H. WORTHINGTON. A. STUART.



OFFICE OF

PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos. 54, 56 AND 58 WEST FRONT STREET.

Cincinnati, _____ 188_

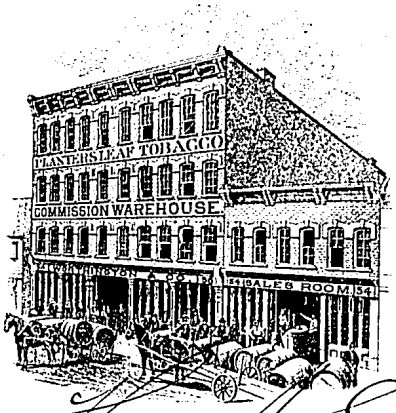
and have everything first class in every respect, my individual opinion is that we ought to have the automatic regulator as we cannot afford to take any kind of chances on this Exhibit Plant. — We have several parties considering the subject of putting in Isolated Plants who are waiting to see it and of course parties will come from all the towns in Ohio to see it work you therefore see the importance of our being fitted up in a perfect manner. and hastily

We are in a great hurry

Yours Truly

A. Stuart Gray

1883-07-28



H. WORTHINGTON. A. STUART.

OFFICE OF

PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos 54, 56 AND 58 WEST FRONT STREET.

Cincinnati July 28 1883

Thos A Edison Esq
N Y

Dear Sir

Your favor of 26th rec'd & noted. I hope you will not fail to get the Stockmeter matter off Monday. We want to get to work at it next week — also Photos

I would be happy if I could hear from Bergmann & Co. the fate of our order —

Yours truly
A Stuart Grey

P S One of our Directors has just returned from Michigan. Saw the Brush Storage battery gets & all. $250 for a 6 footer weighing a ton or so. to furnish a 20 light machine

Economy My Boy

1883-08-03

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

1052a

NUMBER	SENT BY	REC'D BY	CHECK
B149	d	gd	14 pd

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Aug 3 1888

Dated Cincinnati O 3

To Thos A Edison

65 Fifth Ave NY

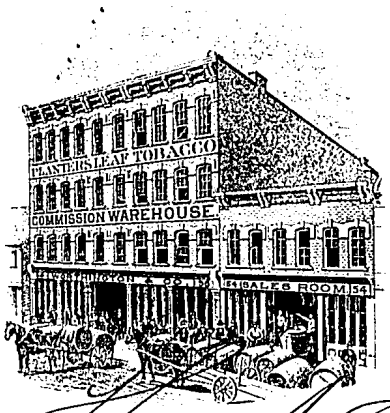
No estimates from you yet

Tell Hutchison office plant not

heard from hurry up.

A Stewart

1883-08-06



H. WORTHINGTON. A. STUART.

OFFICE OF

PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos. 54, 56 AND 58 WEST FRONT STREET.

Cincinnati, Aug 6th 1883

Thos. A. Edison Esq
N York
Dear Sir

Your dispatch received, noted. You should have sent on the Hamilton estimate, and the Middletown estimate when it was ready, as we are working up both towns now.

Committee are waiting to see the light now, but the Good Lord, only knows when that office & plant will be fit up. at the rate things are going, now.

If you succeed in getting it through your head, that we want to do some business. Then stir up those dolalid folks and your engineering department and give us something to work with. and we will forever bless you

Yours Truly

A Stuart Jr

P.S. We want the Georgetown estimate for a 500 light plant soon as possible

over

Mr Johnson:

You received an order July 14 for gun and dynamo, yesterday without goods - although you have Dynamos on hand. This is doing big promptly & reflects great credit on the present management of the Isolated Co.

August 6/13
A. Stuart
Re His Office
Plant & Hitchcock's
reply to same

Johnson

Many thanks for the photos. We have had them framed and they make a very handsome ornament in our office.

J.S.

[ATTACHMENT]

THE EDISON COMPANY FOR ISOLATED LIGHTING.

GENERAL NEW YORK OFFICE, 65 FIFTH AVENUE.

1882

Please address reply to the undersigned.

New York, Aug 10th 188

Mr. Edison: Your points are well taken = I forgive you = Stuart seems unreasonable. Edison

You condemn without audience. The first order reached this office on Wednesday July 25th. (not July 14th as you say.) A statement of materials thought to be required was made out and forwarded on the next day, and a man followed immediately to commence work on Monday July 30th. We were not advised that the plant would start with fewer than 60 lamps, and the work of wiring it was thought would require ten or twelve days. The engine from Vanderbilts was first thought of, and it was taken down and reconstructed, but upon second thought a new engine was ordered from Armington & Sims Aug 1st, which was sent forward yesterday. This delay we could not control. We wrote and telegraphed them, and in no way omitted to hurry them. It is more than likely that the plant will be in operation on 14th or 15th inst, and it doesn't strike me that two weeks time is so very very bad to commence

[ATTACHMENT]

plant including engine.

N McKinson

1883-08-06

Form No. 1.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
130	S	A	8 Paid	MWP

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, July 6 1888.

Dated Cincinnati O 6

To Thos. A. Edison

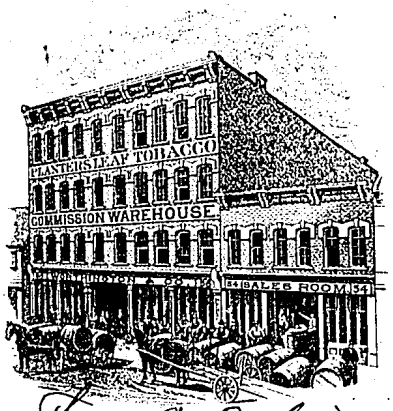
65 - 5th Ave NY

Estimates not received when will they have answer

A Stewart

Ok

FILE NO.



H. WORTHINGTON. A. STUART.

OFFICE OF

PLANTERS' LEAF TOBACCO COMMISSION WAREHOUSE

WORTHINGTON & CO.

Nos. 54, 56 AND 58 WEST FRONT STREET.

Cincinnati Aug 9 1883

Thos A Edison Esq

Dr Sir We sent Mr Dyer check today to Pfaqua for fifty dolls.

Respectfully

A Stuart

9

FILE NO.

1883-08-10

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

AUG 13 1883

Cincinnati, August 10th 1883
12 Aug. 83

Thomas A. Edison Esq.
New York.

Dear Sir!

The map of Middletown, O. recd and forwarded to Mr. Shaw, who is now in Middletown. Have been expecting a rough estimate in total by wire from you, but have received nothing so far. In the meantime, what are we to do about Hamilton, O? We have the people all worked up, ready for organization. A local committee has been appointed to investigate the light as soon as our "Office Plant" is ready, and from present indications they will want to go ahead. What shall we do?

Mr. Shaw is much more favorably impressed with Middletown as a starter. He will answer you in relation to the lot, &c.

It is extremely important that you let us have an estimate or something to work on, as quickly as possible. This going ahead in the dark, is dangerous business.

Yours respectfully,
A. Stuart Secy.
per S.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, August 13th 1883

Thomas A. Edison Esq.
New York.

AUG 15
15th Aug 3
FILE NO.

Dear Sir:

The following are the lots on which we have an option of ten (10) days in Middletown O. viz: Lot 50 X 200 ft to an alley in Block No 12. East side of Main St. 225 ft. North from the corner of Third St. price $2500.00 easy terms — will take no less for cash. — Also Lot 33 X 200 ft. to alley in Block No 10. East side of Main St. 25 ft South of corner of Fourth. good walled well on same. price $2200.00 — Also Lot 30 X 100 ft. in Block No 18. East side Broad St. 250 ft. South of Third St. price $1000.00

I cannot return you the map of Middletown as Mr. Shaw is using it up there.

In reference to my many complaints, which you so clearly fully and forcibly answer. beg to say that on July 29th you stated the Hamilton Estimate would leave your office the following Saturday. On the strength of that we went to work in Hamilton with a view. From there to Middletown. Matters were pushed so that Committees were appointed to come to Cincinnati to see the light and the machinery was not even shipped. Consequently with no prospect for light and no estimates coming

1883-03-23

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

as promised. we had to do the next best thing. try to find out what was the matter

We do not wish to be unreasonable. nor crowd things with undue haste. but after our promises & liberal talk with these people. we felt somewhat embarrassed. and things in regard to those two towns are yet at a standstill.

Everything is ready. waiting for the engine.

In relation to Mr. Dyer. we will keep him at work. Do not be uneasy about that. We are now working on Piqua and Lima — Please hurry up the Middletown estimates. We will also have to have an estimate on Hamilton as soon as possible. as the people there are much more anxious for the Light than at Middletown.

Very respectfully.

A. Stuart. Secy.

P.S.

I omitted to say. that the rear of the first two lots above would answer our purpose. and the balance could be disposed of favorably. though we cannot buy part.

A. S.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, August 15th 1883

Thomas A. Edison Esq:
New York.
Dear Sir;

Your of 13th inst. with map of Washington C.H. rec'd. Please hurry up the map of Piqua, as we are working on that town and will likely send you back locations immediately.

Also yours containing check of Fifty Dollars ($50.00)

We have again written Mr. Dyer to let us know when he wants money.

Our engine has not yet arrived. As soon as you send the estimate for Middletown we expect to round it up.

Respectfully.
A. Stuart. Secy.
E.H.S.

1883 Aug 21

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, August 21st 1883

RECEIVED AUG 23 1883
ANSWERED 22nd Aug 23
FILE No.

Thomas A. Edison. Esq:
New York.

Dear Sir:

The first proof of photograph of "18" Dynamo rec'd. We would ask you to send us a photograph of same uniform with those of the others which we have had nicely framed for our office.

Also please send us the electrotype for our stock certificates. and copies of the catalogues of the Isolated Company. and such others as will be of use to us. We want a good supply of Electric Light reading matter on hand. before the opening of the Cincinnati Exposition. and would earnestly request you to give this your attention.

We have sent you. we think. all the information relative to the lots. &c. in the several towns canvassed. which you desire up to this time. If not. please so advise us. and it shall be promptly attended to. We adopt your choice of lot in Middletown; on Block #18. east side of Broad St. price $1000. I will take necessary steps to secure the same.

Yours respectfully.
A. Stuart. Secy.

5

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, August 22 1883

RECEIVED
AUG 24

FILE No.

Thomas A. Edison. Esq.
New York.

Dear Sir:

We have sent you several days ago all the information we understood you required in reference to Piqua and Middletown. The One of the Committees will be here tomorrow (Piqua) will be here tomorrow night & we want to be in a position to close the contract and turn in the order.

We do not understand why you have not sent us the estimate. Hence we telegraphed you today to forward estimate by mail and telegraph total amount.

It seems to me the best plan to expedite matters in the future would be to have Mr. Dyer get the option on two or three lots and forward to you and ourselves at the same time, as he can certainly approximate closely enough to tell where will be the center of lighting. What do you think of this suggestion.

Yours respectfully
A. Stuart. Secy. S.

P.S. We started up our Officer Stuart last evening, and had quite an ovation,

Your little affair at Sunbury was not a circumstance

Yours Stuart

August 27 1862

J. E. Stuart

Brig General

Williams Brigade

Cavalry

1883

THE OHIO EDISON
LECTRIC-INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, August 26th 1883

Thomas A. Edison, Esqr
New York,
Dear Sir:
We today remit to Mr. Dyer at Ravenna, Ohio Fifty Dollars ($50.00) We advanced him Five Dollars ($5.00) on July 31st — Total $55.00

Very respectfully
A. Stuart Secy.
S.

1883-08-29

St. Nicholas Hotel,
European Plan,
E. K. Roth, Prop'r.

Cincinnati, Aug 29 1883

Dear Jackson

Your memo. in mine of 28th rel. to difference in work of two machines and your suggestion are at hand I checked the speed of both engines to run 251½ for one engine and 252½ for other with load I also indicated the engine and found them to be within 2 h. p. of each other. I tried the changing of buckets but could do nothing with it as they would spark badly. the night I had the third engine running it ran 250. I had no E. M. F. indicator so could not test the pressure I ran the same number of lamps on the three that I had on the two the

1883-08-27

St. Nicholas Hotel,
European Plan,
E. S. Roth, Prop'r.

Cincinnati, ... 188

night previous and the speed was for each engine 251/2. 252/2. 250. I both the speed very hard here and so long as the steam kept about 75# there would be no change either in speed or E.M.F. but when it fell below 75 I was obliged to cut out resistance and at last cut out E.M.F. at dynamo 95#. The engine still Burden kick out of the Armington mill runs nice it was the last one started we did not get steam there it quite 5 o'clk and at 7 it started on 3/4 hour run.

There are many things to talk about when I see you which I hope will be soon. The Cincinnati gift of Hunting is a d-b "humbug and might seem to have been done the Committee will furnish writing not more a man to carry away the rubbish. I got the best of them on Pendleton shaft or which they refused to furnish. The Hartington engine Company wanted a load for their engine and I told them they could drive one of my dynamos if they would furnish belt which they agreed to do, when the Committee heard of it they came to me saying they had agreed to give the Commercial engine a load and had calculated on one dynamo for 35 h.p. of it. I told them I would be very nice pleased to have them drive me but as I could earn 200 dollars by taking from Hartington

it was my duty to denounce
and that I was very sorry
to interfere with Commercial
but could not help
it. the Com. went off and
in about ten minutes came
back and said they would
pay for all Carter's shoes &
left but to keep quiet for
fear they might have trouble
with others. I tried to stick
them for a foundation but
did not succeed

Geo. Rep.
Memo

Chicago Ill.
August 29th 1893
Mr. O. Allen
R. S. Engine
Chicago Ill.

5-6

[ATTACHMENT]

1883-08-29

St. Nicholas Hotel,
European Plan,
E. K. Roth, Prop'r.

Cincinnati, Aug 29th 1883

Dear Coleman

Your letter 25th relative to Ark. engine at Central station not giving you good regulation is at hand. My impression is this must be changed and regulating. I have had some experience with the engine under just all conditions and have never had much trouble. I do not know what I can say to Bim more than you have already said. If I can assist you on my return will do so with pleasure. Got a letter from Hist history saying we had to shut down all our engines at 9 o'clock no steam 27th

[ATTACHMENT]

Cerlier engine running fine
cleaning kept going. I was
afraid such would happen
it was a fright all the
time I was there to get
steam. They have an old
man 70 years of age in charge
of the boilers and he won't
carry steam unless you fight
him. The Cerlier people
have been crying all the
time too much steam and
my impression is they got
advantage of my absence
to shut us out. Did telegraph
me today that they had
cancelled us to run independent
out battery of boilers as I
had planned before leaving
but had not completed. Cer
said now have all the
steam we need

Yours Resp.
M. J. Moore

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

1883 09·11

Cincinnati, Sept 3 1883

We cannot make this work for the type of Dynamo or Engine

Thos A Edison Esq
65 Fifth Ave
New York

Sep 5/83

Dear Sir

We have been doing some hard work in Piqua & Middletown, with not a little at Tiffin, we are now concentrating our efforts on the first named to get it started, Middletown has been satisfied so by the Brush that it makes a fair work for us.

We wrote you for an estimate of a 1000 light Plant, clean cut, for Middletown and will likely want the same for Piqua, The Start is the hard part about this business

We hope to develop something this week, send the 1000 light estimate quick as possible

Yours Truly

A Stuart Secy

3-04-05

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati Oct 5th 1883

Mr. A. Stewart

Dear Sir

Insull wrote Stewart today that as we have tried all kinds of Engines & Boilers & have adopted the Engine & Boiler after other experience with them & guaranteed that we would use the best Engine & Boiler, be satisfied that we would use the best Engine & Boiler. Ordering return flue boilers from us of 3 received and remarks noted. In regard to the figures estimated, if you could go through it and include about all the items outside of the electrical apparatus. We will answer only refer to one item as a sample - Namely the one four 73 HP Boilers can be had at about $600. Engines about the same proportion with all the guarantee you want. Understand we do not wish to jew and take the position of a mere grumbler. But we do suppose you take a deep interest in our success in getting the lights in to the respective towns. And it is not your desire or intention to charge us off with exorbitant prices for the machinery. We have taken hold of this business with the determination on our part to secure it go. If you push will do it. We expect the introduction and use of the system

RECEIVED
SEP 7 1883
ANSWERED

Sept 7 1883

FILE No.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

to pay the largest part of your profit - and that you will not expect to make it all off of the Installation,

However we will drop the question until we produce some practical results, only asking the Insul to be a little liberal, on figures.

We want an estimate for Piqua & Middletown for a 1000 light plant as low as possible The Piqua Committee will be here to night. - Middletown organizes next week, send us these two estimates low as you can possibly make them, and then we will hope to send you orders before the 15th

Wish you could telegraph total amounts

Yours Truly

A Stuart Secy

1883-09-07

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Sept 7th 1883

Thomas A. Edison. Esq.
New York.
Dear Sir;

We send to Mr. Dyer today N. Y. Drft. for ($25.00) Twenty Five Dollars making in all advanced him to date Eighty Dollars ($80.00) for which please remit Check at your convenience.

We note what you say in yrs of 5th inst. It would suit us best to light Middletown first. but as before stated. the people having been swindled by the Brush Company. they are afraid. You sent us an estimate for 800 light plant. with expectation of increase. The temper of every one is to start in a small way. If you will kindly furnish us an estimate for an Eight Hundred (800) light plant for Middletown. with no provision for future increase. you will oblige us

Draw a point on this to make it as low a figure as possible. Our idea is to get this in as quickly as possible as an entering wedge for the State.

The Tiffin Committee have been to Sandusky

1883-09-07

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, 2) 1888

and will report favorably. They are now in New York. and if you see them. put in a good word for us. In the mean time. we will likely want an estimate for Tiffin. and as you have the maps. number of lights &c. you can judge better than we what kind of a plant should go in there.

We will send you central station location in Georgetown & Hamilton in a week or so. We think Washington C.H. will have to wait awhile. We are working hard on the thing and hope to produce results shortly.

Very respectfully,
A. Stuart Secy.
S.

1883-09-17

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Sept 17th 1883

Thomas A. Edison Esq.
New York.
Dear Sir.

We remitted to Mr. P. D. Dyer at Urbana. O. on Sat. 15th inst. a draft for Fifty Dollars ($50.00)

In remitting to Mr. Hastings for the Office Plant. I made a draft on you for "One Hundred Eighty Dollars ($180.00) Please honor same and oblige.

Yours very truly
A. Stuart Secy.

P.S.

We have a fine Company organized at Tiffin and the most of the Stock is already subscribed and it is for an One Thousand Light Plant. So you will have to arrange for one of that size. as we are figuring with parties in two (2) other towns same size.

In ordering Plants. do you fill up the blank contracts before you send them to us, or. if not. what is your programme?

S.

1883-09-29

Mr. Edison,

Stuart and Hoffman have gone home and left their ultimatum with me, which is that they will give us one quarter of all they make instead of one half. This is a compromise between their position and ours. I hate to do it, but in order to get things started in Ohio, I am inclined to accept this offer, and give them one quarter, unless you seriously object.

Please telegraph me on receipt of this.

S. B. Eaton

Sept. 29th. 1883. per Mc.G.

1883-10-09

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Oct 9th 1883

RECEIVED
OCT 11 1883
ANSWERED
.....188...
FILE No.....

Thos A Edison Esq
New York
Dear Sir

I have rec'd your letter and report Mr Campbell is unwell, but trust you will strain a point to get out the Middletown Estimate for 500 lights and the Tiffin Estimate for 1000 lights I am working very hard to start these plants and will be at Tiffin Friday morning and shall need the estimate for Tiffin very bad Consequently have telegraphed you for the same

You will greatly oblige me by responding to my wants the next 30 days quickly as possible ~~and~~ things are crowding along, and when we get these worked up on this business delays are dangerous

You have been fairly prompt with us so far and we are doing our best to appreciate it by sending in some business things are looking a little more favorable and if we get one started the next

61

October 9th 1886

A. Stuart,

requests us to strain a brick to get out Rippin estimate

Cecil Fordham Esq. — Sent Price Power for cement — Rippin Contract

Yours truly

A. Stuart Esq

1883-10-10

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
8.89	Cin		12 Nd	

Received at 852 BROADWAY, Oct 10 1888.

Dated Cincinnati O

To Thos. A. Edison

65 Fifth Ave

First tiffin A thousand second

Middletown Five hundred third

Pigna Five Hundred

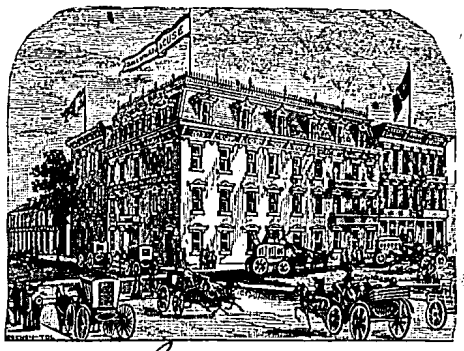
~~A. A. Tom~~ A. Stuart

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Ocay

1883-10-13



"PRIVATE OFFICE."

SHAWHAN HOUSE,

TIFFIN, OHIO.

J. O. PLANK, Proprietor.

ALSO

Proprietor Ocean House and Mana Squan Springs, Point Pleasant, N. J. A popular Seaside Resort.

Oct 13th 1883

Thos. A. Edison Esq
New York
Dear Sir
I suppose you have figured up the estimate for Tiffin, and suppose you put in a frame building but the opinion is universal ~~that~~ that it must be brick,
The stock is about all taken and a full & complete organization perfected here to day, we will order the Plant as soon as we get the estimate.
I hope you have Mr Dyer Conners of Cynthiana Ky by this time please return the Mach and estimate quickly as possible, as we

want to get that started at once

Mr Grant you will greatly oblige me by giving these matters prompt attention

I despatch you to night to send Tiffin Estimate to me at Cincinnati as I leave for home to night

How is Brockton

Yours Truly

A Stuart Gray

X6
10/18/13
A. Adams
re estimate for
Tiffin

1883-10-15

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Oct 15th 1883

Thomas A. Edison, Esq.
New York,
Dear Sir.

Will you please figure up the average of the first sixteen hundred (1600) lights in Lima. Let us have it as soon as possible.

Our very sorry you found it necessary to take Dyer away and hope you have before you receive this sent some one clear to finish Maysville. as we expect to be able to order that plant in a very short time.

We closed up the organization of Tiffin last Saturday. Stock is all taken. and as soon as we get the estimate will order the plant. This Plant goes in under most favorable auspices and we don't want temporary fixtures. People are anxious now to have the wiring of their houses begun. Can you not send a wireman the last of this week, to make a beginning by backing the local plumber.

1883-10-15

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, 2 188

how to do the wiring. It is the calculation to have at least 500 or 600 lights permanently in circuit by the time the Plant is ready to light. and that must be some time between now and December 15th.

You promised Mr. Hoffman & myself. that as soon as we ordered a Plant. you would put it in. in the shortest possible time. We have put a large amount of money into this plant to get the thing started. and the quicker we can get it started. the better for all of us.

We trust you have already sent us the estimate. If not time. you had better on receipt of this letter. put it in the form of a contract and send it on to us at once.

Respectfully.
A. Stuart Secy.

P.S. When do you think of commencing work this way, let me know

A Stuart

Mr Gumaricio

Have you seen
this return?

Sale

Oct 17/83

68

Dairy &
& Stock
Return
in Office

[TO C. H. CAMPBELL]

1883-10-20 Form L

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, RECEIVED OCT 20 1883 ANSWERED 188

188

FILE No.

Mr Campbell

I started to prepare for Mr Stuart of Ohio, a list of all our material embodied in an estimate giving our cost prices - You no doubt found portions of this list on your desk - I wish you would please collect them and have them completed as soon as you can -

Yours

Oct 22 1883

1883-10-21

Form No. 44

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.
This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK	
9160c	Dupuy	36 paid		Mm

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, 21 Oct 1883.

Dated Cincinnati O 21

To Thos. A. Edison

65 Fifth ave NY

You must come without doubt to settle various questions, and if you bring figures estimate may close that also. Have Cynthiana estimate follow quick as possible. Tiffin parties waiting

1883-10-21

Form No. 44

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK	
9160c				Mm

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Oct 21 1883.

Dated

To here Telegraph me what road

You come

A Stuart

1883-10-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
277	Ca h	21 Pd		179

Received at 852 BROADWAY. Oct 22 1888.

Dated Columbus Ohio

To Thomas A Edison 65 5th Ave

Your Coming is vitally important besides tiffin matter we have another greater Magnitude to decide immedy Come tonight one day enough

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. A Stuart Lacy

1883-11-01

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, November 1 1883

Saml. Insull. Esq.
New York.
Dear Sir:

Replying to yours of 29 ult. I beg to enclose the only map of Springfield we have. This is one sent us by Mr. Dyer. and the notes and tracings are his.

I hope it may answer your purpose. If it does not. should be pleased to have you return it at your convenience.

Respectfully
A. Stuart Sec'y.

File

1883-11-06

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 6 1883

Thos. A. Edison Esq
New York.
Dear Sir:

Please let us have the Cynthiana Ky. Map and estimate soon as possible. and as Cynthiana is a small town which admits of a question about its paying. if there is anything in the estimate which we can get along without for a time. leave it out.

Law at a standstill on the Maysville Ky. matter. waiting for the map and estimate. Please hurry them forward, also.

You are aware that the Tiffin people are ready to have their houses wired permanently. You are also aware of the great advantage in having every light in circuit we can possibly get in by the time the Station starts. I wish you would answer the following question, for my satisfaction, positively. one way or the other. as it has been answered both ways from Headquarters. Have you. or have you not. an arc light that can be run.

1555-11-06

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, 25 1888

from an incandescent circuit? If you have, could we use it in Cynthiana, for street lighting, more economically than the incandescent?

Very respectfully
A. Stuart Secy.

S

it can be worked on our circuit but not near so economically or satisfactorily as Incandescent lights of large power & our large power lamps are getting to be excellent in light & economy
We have chances in one & all directions & Mr Johnson is today down at Board Fire Underwriters trying to let us go ahead with it we should not want but few days longer for them if we fail we will do running old way

1883-11-07

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 7th 1883

Mr. Samuel Insull.
New York.
Dear Sir:

Replying to yours of 5th inst. we think now we will be through with Mr. Dyer this week. but hope you will communicate with us before ordering him elsewhere.

Very respectfully,
Arthur Stuart
Sec'y

1883-11-07

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
30 v	Mn	h	9 Paid	1109

Received at 852 BROADWAY.

Dated Cincinnati O 7 Nov 7 1883.

To Saml Insull. 65 fifth ave

Is Mr Edison going to Louisville or not answer

A Stuart

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-07

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 7th 1883

Thos A Edison Esq
New York
Dear Sir

Have you made arrangements to begin house wiring in Tiffin as I have before told you the people are ready to put the light in immediately and if by any possible way we can get enough lights wired to have a few at the start it will give the business a boom in this State and Tiffin is in the humor to make just such a start,

I find it will be a hard work to start Piqua and you must make up your mind to scale it down some when,

I telegraphed you to day asking if Mr Edison was going to Louisville or not and received no reply though I requested an answer

It is very important to me as I would like to see him Yours Truly

A Stuart Jr

1883-11-24

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 8th 1883

Thos A Edison Esq
New York
Dear Sir

Yours of 5th in reference to a map of Springfield received, We are trying to get a map or correct information as you request and will give it prompt attention until the same is secured

We note all you say about our complaining, but true and why is it. You promised to begin work in Tiffin a week ago, You promised me the Mansfield & Cyntheana Estimates, over a week ago, none of the above promises complied with yet.

Did you ever receive my dispatch asking if you were going to Louisville or not I refer to Mr. J. The private secy. "Oh Incandescent Incandescent"

Yours truly
A Stuart Sec'y

1883-11-08

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
243	Cwm	[illegible]	X20

Received at 852 BROADWAY, Nov 8 1883.

Dated Cincinnati O

To Thos. A. Edison

65 — 5 ave

Telegraph total figures Cynthiana

Estimate make it low

A. Stuart

Recy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-12

Major Eaton,

Enclosed please find two letters from Mr. Dyer, which will give you more news about Ohio. We have kept Mr. Dyer in Mr. Stuart's territory for a very long time, have made a great number of canvasses, have already supplied him with three or four estimates, have others under way and now we want to send Mr. Dyer to New Orleans. I have written Mr. Stuart to-day insisting that Mr. Dyer must leave Ohio not later than Saturday next. I should, however, like to have your views on taking this course, as of course we do not want to order a canvasser somewhere else, and then have Mr. Stuart turn around and say to the Light Co. that he is not being properly supported. I am afraid that, as things look at present, it is rather an expensive luxury for canvassing in Ohio, as it costs quite a good deal and the results so far have been very slight.

S. Insull,

November 12th, 1883. per G. B

1883-11-12.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati Nov 12th 1883

Is it the loss of the money that he wanted on his

Photo of Edison Esq

Office the last year

This is not a bug where the iron is to be struck while hot as a bug that we have got on for ever and ever and ever. The benefits derived by a speedy installation in Tiffin will be of very great importance to us all a while within a while." So to speak, however, you will not let us touch anything because we are incompetent, too slow &c, all of which we place on file for future reference.

Now allow me to ask a question. Don't get mad, all the fools are not dead yet and you must be bored with them like other people. So grin & bear it.

It is a settled fact that we intend to put an Edison Plant in Tiffin, It is also a settled fact we want consumers of light. So much is positive. Now there are consumers are ready & anxious to have their stores & houses wired, Mr Deane promised us that branch of the work should go on at once. That was about 3 weeks ago & no motion made at it yet. This plant could be started with 500 lights in circuit if you think it would

1553-11-12.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

be a good idea to do so, there may be reasons why it would be better to wait until after the plant was installed, if so would you be kind enough to let me know what they are so I will not bother you again on the same subject.

So far, if I have found anything out about this business it is to strike while the iron is hot. By so doing the Tiffin plant will play from the start.

Yours Truly

A. Stuart Gray

P.S. I telegraphed you Friday for Cincinnati Estimate. No answer up to present writing. Every thing arranged for meeting to night. City Council was to take some of the stock &c. all to be done to night. No Estimate as must postpone matters.

A. S. Gray

1883-11-13

Pate Sir me
Data to answer
Mr. Insurance - Returning
yours with
seldom give opinions
on general statements. If you
will tell me how long you
have had Mr. Dyer there, how
many companies he has made,
and if I could make my estimates your
have together with the other
towns, I could tell better about it.
If I were to express an opinion
on your general statement I would
say that Mr. Dyer had better be
authorized, but in order to save
myself from subsequent criticism I
generally say to the 40 cts (over)

facts before me [illegible]
in my mind.

Many thanks for the privilege of reading Mr. Davis' letters. I am always glad to see them.

S. B. Carter
per MG

Nov. 13, 88.

1883-11-13

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
No Cem		Cell	

Received at 852 BROADWAY.

Dated Cincinnati O Nov 13 1888.

To Thos. Addison

No 65 - 5 Ave

Try and send Cynthiana figures to Jay

A. Stuart

Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-13

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 16th 1883

Thos. A. Edison Esq
New York
Dear Sir
We telegraphed you for figures on Cynthiana Estimate and also Piqua
The City Council of Cynthiana are figuring on subscribing liberally to the stock. and they were to meet last night. Postponed meet to night — so we telegraph you again to day. On Piqua we and met with a proposition to put the Plant in if they orin $2000 the lot rated $1500 cash $1275 to go down — so we cannot tell what to do until we get the actual estimate on the Hamington lot. — I sent you map with lot marked on it last week —

Yours truly
A Stuart Secy

P.S. Dyer telegraphed us to send him money last Saturday and

We did not receive despatch until monday — then we could not find where he was —

I have repeatedly told him to write before he got out of money and we would keep him supplied — not to wait — until he got out

Stuart

Nov 13 77

A. Stuart

Cornthiana

Nicholas Estimate

1.C.S. - 11. 14.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 14th 1883

Samuel Insull Esq
New York
Dear Sir

Yours of 12th received & noted. Mr Edison Mr Shane & Mr Hastings told us that the Lippin station would be in running order in about 60 days from signing contract & payment of money and I have now letter from Secretary Hastings written two weeks ago. saying you had promised to send men to begin on house wiring at once, This is the great point with us. — With the Edison Light — pay as an investment — is the all important question. here is the best chance you ever had to demonstrate that by having lights in circuit when you start, this you could do if you would.

We appreciate your kindness in allowing Dyer to canvass as he has done and shall strive to repay you. If I had Pigna & Cynthiana figures think I could close this week

I am well aware you cannot neglect all others for us. Still we think we see now the great benefits that would accrue if work was in progress then Yours truly A. Stuart. Secy

[TO C. H. CAMPBELL]

1883-11-16

Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

Campbell
Please give me
number of towns
canvassed in Ohio -
Contracts closed -
(one) Give date when
first canvass started
and last one
rec'd

Tth

1883-11-16

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, Nov 16/ 1883

Mr Insull/ We have made in this the following canvasses :-

Hamilton Mr Owen
Georgetown
Middletown — three estimates rendered
Washington C.H. — high worked [illegible]
Tipp — three estimates rendered
Lima
Tiffin — One estimate rendered, closed after working out separate electrical determinations
Ravenna
Zanesville
Cambridge
Springfield
Akron
Cynthiana
Carlisle

Mr Stuart in Kentucky { Maysville
Chillicothe

Work proceeded within order requested by Mr Stuart. He need all estimates he has asked for both according of Cynthiana and Maysville which he will have on day or two - First Canvass started July 6th last one ended 17th inst.

A. Gate

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
136	Cohapu		1109

Nov 14. 1888.

Received at 852 BROADWAY.

Dated Cincinnati O 17

To Thomas A Edison

Send us Cynthiana estimate or total figures by wire answer

A Stuart

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-17

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 17th 1883

Thos A Edison Esq
New York
Dear Sir

Yours of 15th received & noted, we have no interest in Smith Mfg unless they can do us some good if the Engine is worthless, it settles that, but what do you say about the Cummer Engine, it has beat the Armington & Sims in two contests now on the identical points that you place so much stress on in the required qualities of an engine to do your work,

I telegraphed you again to day for the Cyclotoma figures you promised them some time ago. Hope you have sent them to day. I am in constant receipt of letters & telegrams similar to the inclosed and why you do not start that wiring I confess is beyond my comprehension,

If the Plant is started by Christmas the stock would be worth par, if it is started up in the Spring it will be about 50¢, This would not be such an awful thing on the actual amount invested in Tiffin, but it sets back the development and practical demonstration of the Edison

1883-11-17

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

Light — another year — as to the merits of the light that is about settled, in fact we think the public are rapidly becoming convinced of its superiority — but as an investment — how is it? that's the question, and nothing but actual experience will give a satisfactory answer.

Mr Lin at one time could have been persuaded to wire for 500 lights to start with, in six months it would have made a showing, that would have done Mr Edison more good, than anything else I know of —

Yours Truly

A Stuart Jr

1883-11-19

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
29	Cah	Stand	176

Received at 852 BROADWAY.

Nov 19 1883.

Dated Cincinnati O 19

To Thomas A Edison

Dyer wrote would leave last Saturday for New Orleans

A Stuart Lacy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-19

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov. 19 1883

Thomas A. Edison, Esq.
New York.

Dear Sir:

Rec'd your telegram "Has Dyer gone to New Orleans." & wired you today that he wrote us from Chillicothe that he would leave on Saturday night for New Orleans.

I think there can be no doubt of his returning at that time, as he said his orders were peremptory.

While we much regret losing Mr. Dyer, who has done so excellent work in this field, we still indulge the hope that he may be returned to us on completion of the work now in hand.

You realize that our first selections of towns for canvassing were made on "general principles" in an undeveloped field. While we think the canvasses made will be of great benefit in those towns, & expect to form companies in nearly all of them, yet we now see that the towns we expected him to canvass in the next few weeks are offering

1883-11-14

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

for better prospects in the immediate future. It was, of course, impossible for us to tell which towns would develope the most interest in electric lighting.

Please advise us as to the probability of Mr. Dyer's return and oblige

Yours very truly
A. Stuart Secy.

1882-11-21

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 21st 1882

Thomas A. Edison Esq:
New York.
Dear Sir:

When Mr. Insull was here he will remember he promised us an estimate on further extensions of the Tiffin mains as marked on the map he took with him in the locality on the opposite side of the river from the Central Station.

It seems parties living over there are now very anxious to subscribe for the light. The enclosed letter will explain itself if you will notice it touches on the subject of house wiring.

I wish you would give me some explanation on this point as it places me in a very embarrassing position.

In regard to Cynthiana they will want the streets lighted. I suppose all necessary wires, poles, will have to be put up at the expense of the local Company after you are through add that it will make no difference in your estimate. I suppose it will not require a regular street main, wherever we put

1883-11-21

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, 2 188

lights but that they can be carried on smaller wires. I have never yet had any talk with any of you as to this matter of street lighting. and if it makes any material difference in the estimate please advise me. so I may not fall into an error.

Respectfully
A. Stuart Sec.

1883-11-24

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 24 1883

Thomas A. Edison, Esq.
New York,
Dear Sir.

Have you received options on lots for Chillicothe?

Please inform us at once whether you have or not & if you have all the other information necessary to furnishing an estimate - do you think the place favorable to a 1600 Light Installation?

The same questions apply to Canton. also, & we will anxiously await your reply as to both. Our exhibit plants in both places are running nicely.

Respectfully
A. Stuart. Secy.

Let me see maps

1883-11-26

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 26th 1883

Thomas A. Edison, Esq.
New York
Dear Sir:

Enclosed please find statement of a/c. with Mr. C. D. Dyer, which you will notice includes $50.00 sent him on Nov. 14th.

Referring to your of 20th. as to canvassing. I do not expect you to do anymore of this work until we develope something out of what is already done. We realize it is expensive, and feel keenly our inability to develope them faster. We picked out towns at first where gas was high priced, and most of them proved to be rather dead and unenterprising. This year great complaints are made of short crops, and people are loth to invest in new enterprises. But we have worked very hard and hope yet to develope something soon.

Meantime, when Mr. Insull was here, he promised us the Rythmic estimate. I was under the impression that our option on lots had been sent in writing by Mr. Dyer, but here a few days ago, we were informed such was not the case. If it had not had this mishap I believe Cincinnati

1883-11-26

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, 7 1888

would have been closed up before this.

We sent you answers to your questions regarding Piqua, on 20 inst. The following Friday telegraphed asking for the figures, but have received no answer as yet. We had everything arranged to close that up, as soon as we received the estimate.

We hope you will kindly forward the information we requested concerning Canton & Chillicothe.

Very respectfully
A. Stuart Sec.

[ENCLOSURE]

1883-11-26.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov. 26 1883

Statement.

Thomas A. Edison a/c. (Advances) made

to	Mr. Paul D. Dyer.		
Aug 1	Cash. at Cincinnati.	50.00	✓
" 11.	Check.	50.	✓
" 29	"	50.	✓
Sept 6	"	25.	✓
" 15	"	50.	✓
Oct 4	"	50.	
" 29.	"	50.	
Nov 14	" at Chillicothe.	50.	
Aug 3	By check to A. Stuart.		50.
Oct 1	" draft. on T. A. Edison		180.
Nov 14	" " "		100
		$330.00	$330.00

RECEIVED
DEC 8 1883
ANSWERED
.....188.....
FILE No.....

1883-11-27

Mr. Insull,

Many thanks for this. Techically speaking, the Ohio Company have forfeited their contr ct. I have talked the metter over with Mr. Edison and we have decided to insist upon the forfeiture. Please do not make any more canvasses.

S. B. Eaton

Nov. 27th. 1883. per Mc.G. H.

1883-11-28

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 28th 1883

Thomas A. Edison. Esq.
New York.

Dear Sir:

Enclosed please find draft on United States Nat Bank. N. Y. for Twenty One Hundred Fifty 00 Dollars. ($2150 00) and draft on Francis R. Upton, of the Edison Lamp Works. at East Newark. N. J. for Thirteen Hundred Forty Two. 33/100 Dollars ($1342 33) making a total of Thirty Four Hundred Ninety Two 33/100 Dollars. ($3492 33) being twenty five percent. (25 op.) of your bid for the installation of a Plant for Middletown. of Five Hundred Lights. also find enclosed contracts properly signed and executed by the officers of said Company.

We hope and expect that this Plant will be installed and in complete running order within sixty (60) days. from date.

Very respectfully.
H. H. Hoffman
President.

P.S.
Please execute and return duplicate copy of the contract enclosed.
H. H. H.

Form No. 1.

1883-12-01

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
579	My Dy	SDd	

RECEIVED NOV 30 1883 AM

Received at 852 BROADWAY.

Dated Cincinnati O. Dec 1 1888.

To Mr Saml Insull

65 5th Ave

Middletown Mr D McCally

figure Mr Henry Fleshy

A Stuart Secy

This telegram has just been received at the office in 853 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-03

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec 3rd 1883

Thomas A. Edison. Esq.
New York.
Dear Sir:

Rec'd yours of 30th ult. with enclosed forms for Urbana & Chillicothe, also, today, blue print for Piqua, missent to New Orleans, delayed. Also blue print of Urbana. Also letter of 30th ult. as to Tiffin & Cynthiana. Returning Mr. Bunnis letter for reply to him.

I regret to have to inform you that Mr. Stuart is very ill, and the consideration of matters contained in above will necessarily be delayed a few days. Meanwhile the forms for Urbana & Chillicothe will be forwarded to proper parties for attention, and Mr. Bunnis letter replied to as indicated by Mr. Edison's personal note, for which "thanks".

We are compelled to beg your indulgence until Mr. Stuart recovers, which I hope will be only a few days, when these matters will be attended to by him personally

Truly,
E. K. Sumerwell,

1883-12-03.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec 3rd 1883

Thomas A. Edison Esq.
New York,
Dear Sir:

Replying to yours of 30th ult. as to Dyer's account, we beg to say we sent him the last check for $60.00 on the eve of his departure for New Orleans. This doubtless accounts for his failure to account for it up to this time.

I think his statement from New Orleans will satisfy you; if not, we will send you a detailed statement showing the dates &c. of drafts & sent him.

Truly,
A. Stuart Sec.
per E.K.S.

1883-12-03

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec 5th 1882

Thomas A. Edison, Esq.
New York
Dear Sir:
Have yours of 3rd inst. acknowledging receipt of $3,492.33 on a/c Middletown Plant.
We hope no delay will occur but that work will prosecuted vigorously as the people fear the cold weather will interfere with construction. The same remark applies to Tiffin & Piqua.
Should you be unavoidably delayed please notify us fully at once as we desire to keep posted on the progress of the plants from day to day.
Respectfully
H. H. Hoffman Pr.
pr E.K.S.

1883-12-06

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati Dec. 6th 1883

Thomas A. Edison Esq.
New York.

Dear Sir:

Wired you today "Piqua lot purchased. Install Piqua first."

Owing to Mr. Stuart's severe illness we have been unable to go to Middletown so yet to purchase the lot. but have bought in Piqua. the lot referred to as the Farrington lot. from Mess. Farrington & Swanson. and are ready to proceed with the erection of the Piqua plant.

Hoping you would send your Supt. to Piqua. we requested. & have taken the liberty to write your Supt. at that point. informing him of this purchase. & referring him to Mr. Harry Pilat. for further information. As this is done simply with a view to expediting matters. I trust it will not be deemed an interference.

We hope in a very few days to complete the purchase of the Middletown lot. when we will advise you promptly.

Respectfully.
A. Stuart Sec.
Per. E. K. Sommerwell.

1883-12-07

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

RECEIVED
DEC 10 1883
ANSWERED
188...
FILE No.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec. 7th 1883

Thomas A. Edison, Esq.
New York

Dear Sir,

Share your favor of 4th inst. receipt for $3469.75 & will say, in brief, regarding the Piqua and Middletown installations, that, desiring to push the work in this territory, & finding citizens of the towns we had canvassed unwilling to make so heavy an investment as was required without some demonstration at home, we concluded to invest our own capital in these two towns, Piqua & Middletown, trusting to the merit of the system, as a guarantee that the local capitalists would relieve us, when the plant was under way.

You see we are really in earnest in this matter, and we certainly feel justified in asking your very best work on these plants as their success practically decides ours. We have no doubt that successful Plants in Tiffin, Piqua & Middletown, will enable us to install others rapidly.

This is in explanation so that you see we contract as Installation Co. agreeing with your understanding as stated in yours of Dec 1st

Truly, H. H. Hoffman Pr. per E.K.S.

1883-12-08

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SCHMAN, Treasurer.

Edison's Incandescent Light.

Special

Why would Dyer not answer?

Cincinnati, Dec 8th 1883

RECEIVED
DEC 10 1883
ANSWERED

Dec. 10 1883

FILE No.

Thomas A. Edison, Esq.
New York.

Dear Sir, I will be sent
Considerable
new man there but
perhaps his local
people could
Rec'd your favor of 13 instant
enclosing blank forms of special report
for towns canvassed.

I am unable to understand why they should need attention from us at this late day. I enclose a letter from Mr. Dyer (which please return for our files) by which you will see he notifies us that he sends Mr. Edison now complete report to the one he inclosed us. We have copies similar to the one we hand you for Lima for many towns. We certainly thought he was attending to all such matters. It will necessitate very heavy expense to us to send a special canvasser to each of the towns now to obtain this information again. I admit the form is slightly different but the matter contained is essentially the same. If you have failed to receive the "special reports" copies of which Mr Dyer forwarded us, we can, if desired make copies from ours for

without
suggestion

1883-12-08

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, 21 188

the fifteen (15) towns in all sent us by Mr Dyer.

We have also on file options on lots in several towns, including Urbana, which we will be happy to send you. Mr. Dyer, at Mr. Stuart's suggestion, ratified by you, secured options on central station lots for most of the towns canvassed, which we presume he has sent you. If we are wrong, please inform us.

We regret that we did not know of this matter when our agent was in these several towns, as he could then have procured this information more easily. However, we are ready to aid you by any means in our power. Await your suggestions.

Respectfully,
E. K. Sumerwell,
for A. Stuart, Sec.

1883-12-13

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec. 13th, 1883.

Mr. Thos. A. Edison,
#65 Fifth Ave,
N. Y. City.

White brick
is best E

Dear Sir:- I concluded the purchase of a central station lot at Middletown, O., yesterday. The location is on Water street, about 100 feet south of Third street, 40 feet on Water street by 100 feet deep to an open alley; a railroad switch runs down Water street, which will enable us to dump coal in our coal house from the track. A hydraulic is within a few feet of our line and is the best water for boiler purposes in the town. There are four paper mills, one grist mill, one planing mill, one foundry and machine shop, all within 350 feet of this lot; within a few feet two principal hotels, within 200 feet three banks, and not in excess of 700 feet from the business places of any account in town. This location will certainly save considerable in conductors and feeders and pole lines. I observe in your itemized estimate for Middletown that you have Estimated a frame building at $2210 while you quote for Piqua $1350. Is this an error? Personally I am decidedly in favor of brick buildings for central stations. It has the appearance of being more substantial and makes a better impression

[ON BACK OF PRECEDING PAGE]

Mr Edwin

I arranged with Rich yesterday to put up a brick building at Middletown - There is such a difference between this and the price of the Pagna building that we could not do less than brick is very cheap at Middletown

Dale

Dec 17/83

1883-12-13.

(2)

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

upon the local people. Frame, no matter how well built, has a cheap appearance. I wish you would seriously consider the erection of brick buildings for both Middletown and Piqua, if the construction contracts for Piqua have not already gone to far. The brick building for Middletown can be sub-let for a considerable sum less than you quoted for a frame, if you cannot undertake to substitute brick for the frame at the price named. Please write to the Installation Co. stating what the additional cost will be, as further all estimates for this state will be, exclusive of brick. Mr. Stuart is still confined to his room and I find it necessary to look after the office matters as well as the outside business of this company, and this is the reason why I write you personally. I beg to acknowledge the receipt of your letter of the 11th in relation to the Mt. Carmel plant. Will you kindly inform me what progress has been made at the other points in Pennsylvania. I shall expect an early reply to this letter as I am likely to go east very soon.

Very truly yours,

P. S.— I send you by this mail under separate cover, the Middletown "Blue" print with the new central station marked on.

R B Shaw sa

1883-12-14

THE OHIO EDISON
ELECTRIC·INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec. 14, 1883

Mr. Thomas A. Edison
#65 Fifth Ave. N. Y. City,

Dear Sir:-

Replying to your favor of Dec. 11th, we have to say that as we have no man now in any of the towns for which estimates are being made, and as Mr. Stuart is sick I do not think you can depend upon us giving you any further data.

Very truly yours,

Ohio Edison Electric Installation Company,

G.

Campbell

We must rely upon our Canadians to obtain the data for the future

C. C. Pole

1883 12-20

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec 20th 1883

Thomas A. Edison. Esq.
New York.
Dear Sir.

Yours of 18th recd. also maps & forms of contracts.

The estimate for alteration of line of mains in Piqua seems so disproportionate to the rest of the work that we cannot decide a matter of such importance without consulting the Piqua people. However. do not permit this to delay the other part of the work and we will try to give you a definite answer early next week.

We note your remarks in letter of 17th to Mr Shaw. & expect the new lot in Middletown to save us considerable from former contract. as it is far superior in every respect to any other considered.

You of course understand through Mr. Shaw that we must have brick buildings in all cases

Respectfully.
A. Stuart. Sec. per O.K.S.

1883-12-31

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Decr. 31st 1883

Thos A. Edison Esq
New York.

Dear Sir,

Yours of the 28th recd. I will attend to the selection of lots in the towns you named as soon as I possibly can. I have had a very serious illness and am just able to creep around. I find many things that have been neglected which I will attend to promptly in a few days.

We telegraphed you this morning about change in the Piqua plant, we have an estimate from you for a 1000 light plant, for Piqua of $22,416.52, this estimate is not made from the Farrington lot, which lot will be the one used. That they are now working on, will you put the plant in on this estimate or make out another? If we use this estimate please send us a print showing mains, where run &c, also make out your contract between you and ourselves for the installation, give us credit for what we have already paid you and we will send you check for balance

(21)

1883-12-31

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

of your 25 o/o, we hope you will be able to arrange at once any necessary changes in the buildings, if any is required and let that part of the work go on without delay.

Yours Truly —

A. Stuart Secy

(1883)

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK.....188

1200 on Count

A. A. Hoffman
of Chas Buchanan & Co
Chicago

Henry Worthington
H. L. Worthington
A. Stuart
Samco Hoffman
A. A. Prague
C. Wallace
J. B. Shaw

Chicago

9

Incorporators
of Ohio Edison
Electric Installation
Company

EDISON'S INCANDESCENT LIGHT.

THE LIGHT OF THE FUTURE!

Having obtained the exclusive right for the State of Ohio, with headquarters in Cincinnati, we are prepared to supply the Edison Light to parties desirous of making and furnishing themselves a light which is superior to any other in existence, especially so on account of its steadiness, illuminating power and remarkable freedom from heat and dirt.

All the above advantages can be obtained by the consumer without any additional cost over that of gas. The economical benefits resulting from its use, as applied to any and all purposes, are too many and varied to enumerate here, but are much easier explained where the Light is in use. We therefore cordially invite you to call at our office any evening which suits your convenience, where the Light can be seen and the entire system explained.

Very respectfully,

THE OHIO EDISON ELECTRIC INSTALLATION COMPANY.

Office, Room 2, Bradford Block,
N. W. COR. SIXTH AND VINE,
CINCINNATI, OHIO.

(1883)

TESTIMONIALS.

The following letter is from Mr. Richard Kolb, one of our customers in the First District, New York City, supplied with light from the Pearl Street Station. The letter was written to a gentleman seeking for information about our light, and we publish it with his consent:

KOLB'S RESTAURANT, 164 Pearl Street, May 3, 1883.

COL. G. W. SHERMAN:

Dear Sir:—I take great pleasure in answering your inquiry in regard to Edison's Incandescent Electric Light, which I have been using for the last nine months. It has been giving me entire satisfaction, and is the most perfect light that I have ever used, its cost is no more than gas, in fact it has no equal with any light so far in use. It is bright, steady, clean and easily managed, and always there when wanted, day or night, and entirely free from danger of fire.

In my estimation I consider this the most perfect mode for illuminating, and should it be even more expensive than gas, I should not like to be without it.

Yours,

RICHARD KOLB.

We have received the following testimonial from Messrs. W. Knabe & Co., who are using an Edison plant in their piano factory:

BALTIMORE, June 4, 1883.

EDISON CO. FOR ISOLATED LIGHTING,
65 Fifth Ave., New York:

Dear Sirs:—In reply to your favor we are glad to say that the Edison Light has given perfect satisfaction. We are using 150 B lights from your Z dynamo since last November in our case-making department, where we formerly permitted no light whatever, not wishing any risk from gas jets or the use of matches in lighting same The dynamo runs direct from shaft of fly which makes 58 revolutions per minute, the light being very steady, without the least flickering; your arrangement of flexible tubes is a very ingenious one and the workmen are delighted. The breakage of lamps has been altogether but very trifling and mostly by carelessness, and the entire time required of engineer for attention to dynamo not over 15 to 20 minutes each evening. We cheerfully recommend the light to every manufacturer, being as near perfect as any can possibly be. With best wishes,

Yours very truly,

W. KNABE & CO.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-Prest.

A. STUART, Secretary.
JAMES SPILMAN, Treasurer.

THE OHIO EDISON

Electric Installation Co.

FOR INCANDESCENT LIGHTING,

By the Edison System.

OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE STS.

CINCINNATI, O.

Thos A Edison Dr
To Ohio Edison Electric I Co
Cash Advanced to Mr Dyer
Worthington Co as directed Paid — ~~50~~
Aug 26th 83 " 50
Sept 7 " 25
15 " 50 —
July 31 " 5 —
$1 80

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Ohio - Middletown (D-83-054)

This folder contains correspondence, reports, and other documents relating to the establishment of the Edison Electric Illuminating Company of Middletown and to the organization of a central station at Middletown.

All the documents have been filmed.

New York, Sept 30th 1883

David Jessel Esq

Dear Sir

I intended to have some talk with you about the form of contracting for the construction of a Plant. When the Middleton estimate is finished, will you please put it in contract shape and send it on with the estimates and please send them as possible. If you will also send me one of your blank construction contracts it will oblige

Yours truly

1883-11-28

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where a claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
B257	CRush	32 paid	Nite

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Nov 28 1883.

Dated Cincinnati Oh

To Thomas A Edison

65 Fifth Ave NY

RECEIVED NOV 28 1883

ANSWERED Nov 28 1883

FILE No.

Just closed five hundred light plant for Middletown signed contracts & draft on Newyork goes forward tomorrow will you undertake to do the work

1883-11-28

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
			Nite

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Nov 1883.

Dated In sixty days weather permitting answer

To Palace Hotel

P B Shaw

1883-12-03

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Dec 3 1883

Thomas A. Edison, Esq.
New York.
Dear Sir:

Rec'd yours of 1st inst. enclosing contract with you for Middletown Plant, signed by you.

I have complied with your request to insert word "Middletown". Their seal is not yet made.

The names of the Stockholders as we have them at present are. D. McCallay R. Wilson. C. B. Johnson. C. H. Wardlow. J. K. Thomas. H. H. Hoffman. A. Stuart. F. A. Prague. P. B. Shaw. The first five named gentlemen of Middletown, O.

I enclose herewith the contract signed by us, corrected as above, which I trust will be satisfactory.

Respectfully.
H. H. Hoffman.
per C. H. Sumerall.

Memorandum of Order #563 Dec 6 1893
for Middletown Phy.

6 Plug Switches for feeders with Safety Catch attachment.
1 Amphere Meter
4 Pressure Indicators
2 Regulators for "S." Dynamo
1 Switch
1 Doz. Johnson Connectors } bored for #00 wire
1 " Straight " "
1 " T " "
1 " L " "
5 Key Sockets 3 - 3/8" Round
2 - 5/8" "
3 Gas Shades & Sockets
1 - 24" Swg Blt for office
1 - 12" Cliff " " Engine Room
1 Main Cut out
3 Branch " "
3 Plain Iron ceiling flanges. 3/8"
5 lb Red Paper
100 Sweet. 2 1/2" Cleat
Lamp cord & switches for 100 Seat Stadat
Lightning Arrester & Plug Switches *

from Bergmann & Co J Klein Jany 1893

[TO C. H. CAMPBELL]

1883-12-12.

Mr. Cambell,

Please note the attached telegram, in referance to lot at Middletown.

A. O. Tate,

Per. B.

Dec. 12th, 1883.

[ENCLOSURE]

1883-12-08

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
576	Dd	Dy	29 Dd

Received at 654 BROADWAY.

Dated Middletown Ct Dec 8th 1883

To Thos A Edison

65 - 5 Ave

Wire me cincinnati whether you can use to advantage lot twenty five by two hundred situated directly opposite church lot running to alley near main between third & fourth

This telegram has just been received at the office in 654 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

P B Shaw

[ENCLOSURE]

Campbell
Give me data
on this quote

1883-12-12

1648-N.

THOMAS J. K.....|OF EDISON ELEC. ILLUM CO.|..MIDDLETOWN, BUTLER CO, OHIO.
BELIEVED TO BE A MAN OF GOOD GENERAL STANDING AND EXCELLENT
BUSINESS QUALIFICATIONS. SEEMS TO BE HIGHLY REGARDED IN THE COMMUNITY
AND IS REPORTED TO BE WEALTHY.

DEC 12-1883.

Cincinnati, 17 17 188 83

To Thos. A. Edison
65 5th Ave

The correctness of this report is not guaranteed, but having been obtained by us in good faith from authorities deemed reliable it is transmitted to you in strict confidence for your exclusive use and benefit, and in accordance with the terms of the contract existing between us.

Respectfully,

[SEAL] THE BRADSTREET COMPANY.

THIS REPORT IS LOANED TO BE RETURNED IN A REASONABLE TIME.
THE BRADSTREET COMPANY.

THIS REPORT IS RECORDED IN THE COMMITTA
BOOK, AND MUST BE RETURNED ON DEMAND.
THE BRADSTREET COMPANY.

DEC 10-1883.

BRADSTREET'S

1883-12-12

1647-N.

MC CALLEY D. . . OF EDISON ELECTRIC ILLUM. CO. . . MIDDLETOWN, BUTLER CO- OHIO.

IS UNDERSTOOD TO BE OF GOOD BUSINESS ABILITY AND SAID TO BE IN GOOD GENERAL STANDING. HE IS BELIEVED TO CONSIDERABLE MEANS AND THE WITH THE TWO OTHER PARTIES ASSOCIATED WITH HIM IN THIS "CO" IS ESTIMATD WORTH IN THE AGGREGATE FROM THREE TO FOUR HUNDRED THOUSAND DOLS.

?DEC 12-1883.

1883-12-12

1647-N.

WILSON R. . . . . OF EDISON ELECL. ILLUM. CO. A. . . . MIDDLETOWN, BUTLER CO, O.

IS LOCALLY REPORTED T O BE IN EXCELLENT GENERAL STANDING AND BUSINESS QUALIFICATIONS SAID TO BE GOOD. BELIEVED HON ORABLE IN DEALINGS AND UNDERSTOOD TO BE POSSESSED OF CONSIDERABLE WEALTH.

DEC 12 1883.

Cincinnati, 12/17 188 83

To Thos. A. Edison

The correctness of this report is not guaranteed, but having been obtained by us in good faith from authorities deemed reliable, it is transmitted to you in strict confidence for your exclusive use and benefit, and in accordance with the terms of the contract existing between us

Respectfully,

[38] THE BRADSTREET COMPANY.

BRADSTREET'S

DEC 13-1883.

THE BRADSTREET COMPANY HAVING DEVOTED THE
LAST TWO OR THREE YEARS TO PERFECTING
A SYSTEM OF REPORTS WHICH SHALL
BE FURNISHED ONLY TO SUBSCRIBERS
WHOSE BUSINESS WITH THE
NO CONTRACT WITH THE EDITOR
BRADSTREET'S

Cincinnati, 12/17 188 83

To Thos. A. Edison

The correctness of this report is not guaranteed, but having been obtained by us in good faith from authorities deemed reliable, it is transmitted to you in strict confidence for your exclusive use and benefit, and in accordance with the terms of the contract existing between us

Respectfully,

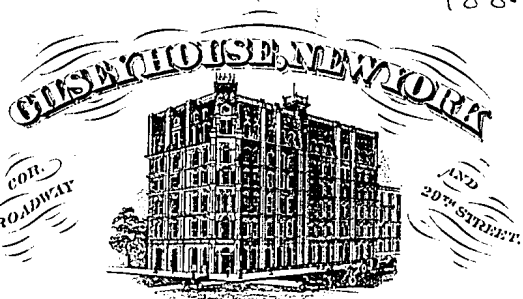
[38] THE BRADSTREET COMPANY.

BRADSTREET'S

DEC 13-1883.

THE BRADSTREET COMPANY HAVING DEVOTED THE
LAST TWO OR THREE YEARS TO PERFECTING
A SYSTEM OF REPORTS WHICH SHALL
BE FURNISHED ONLY TO SUBSCRIBERS
WHOSE BUSINESS WITH THE
NO CONTRACT WITH THE EDITOR
BRADSTREET'S

1883



J. H. Breslin & Bro.
PROPRIETORS.

Mr Tait

New York, _____ 1883

P.S. The young man who figures up the average on consumption in the wash room, promised to give me a wash of Middletown with all the information of average &c upon it. He being out & failed to get it will you please have it sent to me at once & oblige

Yours Truly
A Stewart Jr

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Ohio - Piqua (D-83-055)

This folder contains correspondence relating to canvassing, promoting, and establishing a central station at Piqua. Most of the correspondence is by Archibald B. Stuart, secretary of the Ohio Edison Electric Installation Company.

All the documents have been filmed.

1233-08-06

CITY HOTEL.

A. J. ROE & SON, Propr's.

Piqua, O. Aug 6th 1882

Mr Insull:

Dear Sir:

I have put in tremendous and satisfactory work to-day, and will finish up to-night.

Since I last wrote I have encountered the Editor of the Piqua Leader. He studied up the different systems of lighting by Electricity the best he could with the facilities in Olin's got a number of gentlemen interested, and wrote to 65-5th Ave for information regarding Station lighting - This was several months ago. The reply was that we were not prepared at that time to do Village Plant work.

This gentleman still holds his opinion of the Superiority of the Edison System.

his friends are as ready as ever for a good investment, and the only thing remaining to be done is to have an authorized party come here & form a Company. This Editor took Mr Stuart's address & will write him at the earliest opportunity.

This makes the second distinct party I have struck & I find out one bitter Anti-gas man.

Mr Connover, the gentleman I mentioned in my last letter owns a block of business houses the Opera House & was half owner in the Gas Company two years ago. He is about my age, and is an enthusiast in this Scheme. He calls every day, and has gone around with me, to see that I get information called for in Special Report Straight.

The people he has been talking

1883-08-06

CITY HOTEL.

A. J. ROE & SON, Propr's.

Piqua, O. 188

light to, are a different set from the Editors friends! Between the two sets Mr Shaw will have a fat thing.

Mr W. P. Orr. President of City Council. owner of two oil mills & one paper mill & part owner in another mill. tackled me to-day & said. If he could get the assurance that Stuart will begin here soon and will be prepared to do Street lighting he will hold the gas people off & not renew their Contract which expires Sept 1st next, until he hears from the Representative of the Edison System. That in one of his mills the oil lamps do not give sufficient light: and he will delay filling

the place ripe for gas, if there is any certainty of our commencing here soon.

I requested him to lay the gas petition aside at next meeting of the board & I will write to Mr Stuart when I come in to-night.

Mr Orr's Paper Mill is four blocks beyond the area I canvassed; his other two mills are within that area, and one, the largest, is in the very centre of it.

Ohio will certainly be a splendid field. There is a noticeable difference between this & Pennsylvania towns.

In Pa I did not meet anyone who had even a newspaper knowledge of the application of the force of electricity to practical uses. In Ohio I have met parties who have investigated the subject and are conversant

1883-08-06

CITY HOTEL.

A. J. ROE & SON, Propr's.

Piqua, O. 188

with it.

I wish Mr Stewart were here. I could introduce him to these parties & he could form a Co in 30 minutes & by the time the Office was ready to submit an estimate, the Company would be in good working order.

Mr Shaw or Mr Stuart can not get here too soon. Piqua is ripe for their reception: and after the preliminary of forming a Company, the danger from other scopers is insignificant. You see the Brush or Maxim scoper could step in here one day and reap the harvest by right ours. Or at least so spoil the place for ligitimate business that it would be discouraging work

to make any progress.

The longer I am engaged in this business the more pressing I see the necessity for immediate action.

I will have canvass expressed to-morrow.

Check has not arrived.

Yours Respectfully
Paul D. Dyar

Augusta Ga Jan 23
Col Dyer
Atlanta Ga

CITY HOTEL.

A. J. ROE & SON, Propr's.

Personal

Piqua, O. Aug 7 1883

Mr Insull

Dear Sir:

I will have to sojourn in Piqua until arrival of the dust.

I dislike to idle in a place because I am anxious to finish my part of the work along. Otherwise it will be exceedingly pleasant here.

I know most of the men who will eventually form the local Co: and one Mr Conover is making it very agreeable for me.

I have an engagement with him to-night.

By the way, he wanted some written matter on the Edison system & work. I gave him the office address. A few well selected bulletins would be read by

him + his friends + would sus-
-tain them until Shaw arrives
with more substantial sustinance.
I take this opportunity of
sending on my expense acct.
as I haven't the price of a
stamp.

Very Truly Yours
Paul D Dyer

Mayor Tufts
Lt. Dyer
Re- Expense

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
162	Lv	Mu	130d

Received at 791 ~~BROADWAY~~ 852 BROADWAY.

Dated, Cincinnati O 17 Aug 17 1882.

To Thos A Edison

65 = 5 Ave

Send estimate for Pigua quick as possible waiting for it location sent yesterday

A Stuart

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1. 1883-08-22

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an **UNREPEATED MESSAGE**, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
193	Co	R	10 Paid 24

Received at **852 BROADWAY.**

Dated Cincinnati O W Aug 22 1888.

To Thos A. Edison

65 - 5 ave Ny

Send Pigua estimate immediately telegraph total amount Saint Middletown Saturday.

A. Stuart

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. Recy

1883-09-18

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

RECEIVED

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, upon which the Company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, at a reduced rate, beyond a sum equal to ten times the amount paid for transmission; nor in any case where claim is not presented in writing within sixty days after sending the message.

ANSWERED

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY			
B 303	Gray	3 1/2	CHECK 288 FILE NO.	3 1/2 6a	

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Sept 18 1888.

Dated Cincinnati O

To Thos A Edison

65 Fifth ave NY

RECEIVED SEP 18 1888

ANSWERED Sep 18/88

FILE NO.

We must have an Estimate for thousand light plant for Pigua by Thursday night sure - Give it to us in some shape Cant figure on anything else send it without fail

A Strast

1553 11-09

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 9th 1883

Thos A Edison Esq
Pittsburgh
Dear Sir
Please give us an Estimate made from the Kensington lot marked on blue print and telegraph figures Monday next
We are trying hard to get this Plant in and will have to take a lot of the stock. On this lot is a building that will be taken away, leaving a No 1 Stone foundation very solid, and Brick Building and will guarantee you it can be built for $800
Work this estimate inside of $12000. Also figure up average running & give us Mail map with this letter Yours

A Stuart, Sec'y

Let me have it Monday

1883-11-23

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
1279 - Cin	2h		Paid Nite

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Nov 23. 1883.

Dated Cincinnati O 23

To Thos A Edison

65 Fifth Avenue

When can we get the Sigma Estimate

Answer

A Stuart

Secy

1883-11-26

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
873	Con	W	Wd

Received at 852 BROADWAY. Nov 26 1883.

Dated Cincinnati O 26

To Thos A Edison

65 - 5 ave

Please give us the Sigma figures

A Stuart Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-30

CITY HOTEL.

A. J. ROE & SON, Propr's.

Piqua, O. Nov 30th 1883

Thomas A Edison
New York City
Dear Sir.

The proprietor of this Hotel is very anxious to have a Map Board to his Dyer Canvasser returned, please give the matter your attention.

And oblige
Very truly yours
R B Dean

everything at this point closed and going ahead nicely
Respectfully R B D

1883-11-30.

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Nov 30th 1883

Thos. A. Edison Esq
Dear Sir!

Your telegram giving cost of Piqua Plant duly received. The estimate & blank contract for the same have up to this time failed to reach us. As we are extremely anxious to have the Piqua plant installed simultaneously with the Middletown plant we enclose you our check for 25% of the telegraphed price, which we accept E. & O.E. Please acknowledge receipt of this money & return to us contract properly executed by yourself. together with specifications &c.

Yours truly
H. H. Hoffmann Pres't
The O. E. E. Inc Co.

fill up & execute a contract for the construction of the plant.

4

1883-12-06

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
N46	Cv	Cm	1 30 PM	

Received at 852 BROADWAY. Dec 6 1883.

Dated Cincinnati O

To Thos. A. Edison

65 - 5 Ave

Pigna lot purchased install pigna first particulars mailed you also superintendent at Pigna

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. A Stuart Secy

1883-12-18

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
131	Cv	Cm	11 Paid	

Received at 852 BROADWAY. Dec 18 1883.

Dated Cincinnati O 18

To Thos. A. Edison

65 Fifth Ave

Put in brick building for pigna we will pay the difference

P. B. Show

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-31

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. 105 NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
353	GB	L	12 pd

Received at 852 BROADWAY. Dec 31 1888.

Dated Cincinnati O 31

To Thos A Edison 65 5 ave

The Pigua plant is changed to a one thousand lights See letter

A. Stuart Gray

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-31

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
476	Co	L	28 pd 183

Received at 854 BROADWAY Dec 31 188

Dated Cincinnati O 31

To T A Edison 65 5 ave

Pigua plant is to be one thousand lights you send new contract we will execute and pay balance at once make necessary changes and continue work on building

A Stuart Gray

This telegram has just been received at the office in 854 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883. Electric Light - Thomas A. Edison Construction Department - Stations - Ohio - Tiffin (D-83-056)

This folder contains correspondence, agreements, maps, and other documents relating to the establishment of a central station at Tiffin. Much of the correspondence is by Edison employees William S. Andrews and Isaac C. Walker; by Archibald B. Stuart, secretary of the Ohio Edison Electric Installation Company; and by officers of the Tiffin Edison Electric Illuminating Company, including J. F. Bunn, vice president, and E. B. Hubbard, secretary. Some of the letters by Andrews are partially illegible due to water damage.

All the documents have been filmed.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
473	Pd		Paid

852 BROADWAY.

Received at 791 BROADWAY.

Dated Tiffin O 18 Aug 18 1883

To Mr Saml Turell

65 - Nav

Sirs Convince Express rec'd Package at Tiffin adds Potts Hotel

Victor

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

44

August 8/63

Prof. D. Dyer

re - his address

in Tiffin O. re

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Sept 5th 1888

Thomas A. Edison Esq.
New York.

Dear Sir:

We have one 1000 light plant [illegible] to install [illegible] would be a fatal error to make no provision for future extension [illegible] confidence.

RECEIVED SEP 7 1888 ANSWERED

Sep 8/1888

FILE No.

A Committee composed of several of the best men of Tiffin, Ohio will reach Sunbury, Pa. tomorrow, where they will meet Mr. Shaw for the purpose of investigating the workings of the village plant system there — with the view to immediate organization of a local company.

Everything indicates success in this matter, and we hope to be in shape when they return to make them a positive & definite proposition. They will come to Cincinnati for this purpose early next week.

Please send us for use at that time, if you possibly can, an estimate for a One Thousand (1000) light plant, wired for 1000 lamps, & no provision for alteration — together with a map of the town. The central station location will be in the immediate neighborhood of the Court House.

If you are unable to complete the estimates in time to reach us by mail, please wire us the total amount.

Respectfully,
A. Stuart, Secy.

1883-10-05

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 3, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Oct 5th 1883

Thos A Edison Esq
Dear Sir

Will you please have the average burning on 1000 lights plant figured up on reach for Tiffin. and also send the estimate at same time including a sufficient dynamo to enter a building subject to increase to 1600 lights. Make it a figure that you can squeeze thro out a little discount & as Mr Shaw got us into a scrape by agreeing to feed up the Plant at actual cost, I shall want the estimate

We have the money almost raised and are in a hurry for the above

Yours truly
A Stuart Secy

I want to close Tiffin up next Saturday so hurry up

56

October 5th 1883

A. Stuart

requests average burning hours of lamps on 1000 light mch.

1883-10-09

Form No.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, but at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.
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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
1195	O	mm	10 Paid

mm

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Oct 9 1883.

Dated Cincinnati O 9

To Thomas A Edison 65 Fifth ave NY

Telegraph figures Tiffin Thousand light
Estimate by Thursday light sure

A Stuart Secy

1883-10-11

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
450	Co	Ly	12 Pd

Received at 852 BROADWAY. Oct 11 1883.

Dated Middletown O 11

To Thos A Edson
65 Fifth Ave

Telegraph total figures of tiffin
estimate to Mr at Tiffin
shawsan House

A Stuartson
Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.
DIRECT WIRES.

Form No. 1.

1883-10-12

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
514	Mr	K	9 paid

Received at **852 BROADWAY.** Oct. 12 1888.

Dated Jeffersonville O 12

To Thos A. Edison

65 S. 5th Av.

Telegraph me the total figures of estimate — Please quick

A. S. Stuart —

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-12

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
H94	fa	Ly	13 Pd

Received at **852 BROADWAY.** Oct 12 1888.

Dated Jeffersonville O 12

To Thos A Edison

65 — 5 Ave

In telegraphing estimate give dimensions and cost of building are awaiting for it

A Stuart Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-13

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
595	Horsey	J Pd		

Received at **852 BROADWAY.** Oct. 13 1888.

Dated Tiffin O 13

To Thos A Edison

65 - 5 Ave

Send tiffin estimate to Cincinnati

Stuart left up

A Stuart

Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-13

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
814	Co	Km	10 Pd	320

Received at **852 BROADWAY.** Oct. 13 1888.

Dated Tiffin Ohio

To Thos A. Edison

65 Fifth Ave

Boys are anxiously waiting

Estimate telegraph dimensions

and cost building

A Stuart Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-16

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Oct 16th 1883

Thos A Edison Esq
New York
Dear Sir

I received a dispatch from you when at Tiffin in which you stated the building for the Central Station would be 34 X 37 ft 8 inches, that being the case why cannot we use one or the other of the cheaper lots — the Clark lot which is better located than the one selected is 40 X 60 = $2100 and the Smith Lot 48 X 60 $2000 This last lot seems to us plenty large enough and fully as well located as the $3000 lot. It is all solid ground street paved in front of it and it is perfectly level, running on alley. please examine into this matter.

As I before wrote you the company is organized in Tiffin money all subscribed by the best men in the town, and it is a very lively town a dairy to light.

I had hard work to get it closed up and finally to settle all questions and get the thing started without delay Mr Hoffman

1883-10-16

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

took $5000 of the stock and I took $5000 making a total of $25,000. Our company could not come to an agreement with them so we took it individually, That being the case am anxious to see it go ahead I wrote you yesterday to get the estimate in the form of a contract and send it on to me to save time,

I want you to understand that the light goes in here under different circumstances than Sunbury or Shamokin, they do not want to wait to see it burn, they want their houses wired at once and by the time the station starts at the lowest calculation they will have 600 lights in circuit hence the necessity of sending a man at once with material to begin the work and teach the local plumber crew to do the work & as soon as they are competent licensed then & turn it over to them, The contracts will be sent forward to morrow or next day and as E E L Co forms are used & all requirements complied with they will be executed at once so I hope you will not hesitate to comply with

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

1883-10-16

Edison's Incandescent Light.

Cincinnati, ... 188

the above Now Mr Edison I promised the light should be turned on by Dec 20th and if you will strain a point for us and do it, we will be able to do big work in getting it in by spring to a number of surrounding towns. Tiffin is almost up with her subscription to the Closing point, and as soon as it was known in other towns that you were at work in Tiffin it would be a great help to me. The time is short but I hope you will put it through.

If you have not sent your Construction contract, send it to me at once.

As this was a hard fight this Tiffin matter I wrote you to figure a little discount for us on the estimate, I see it is $1000 larger than the Tiffin estimate ~~$~~ so I feel that you have done so, as Tiffin is certainly an easier man contract down to light than Tiffin

Please send me the average on Lima and the Tiffin & Middletown & Springfield estimates quickly as possible all 500 lights

Yours truly
A. Stuart Sec'y

over

P.S. Mr Jewell will you please give instructions to have all my matters attended to promptly and ~~if~~ I will promise not to cause you any unnecessary trouble that I can possibly avoid

Stuart

Oct 16/83

Attach

to building for

Central

Station

(1) 1883-10-16

E. B. Hubbard's
English and German Pharmacy
Cor. Washington and Market Sts.

Tiffin, Ohio. Oct 16 1883.

Mr Thos A. Edison
New York City

Dear Sir

We understand that your Estimates for the Tiffin Plant are based upon the taking of what is known as the Freyman lot fronting on Madison St.

Believing that the facts have not been fully and fairly presented to you, we take the liberty of stating that this lot is opposed by all of the Directors of our Company except the one having it for sale and also of giving our reasons for so doing -

The Methodist Church situated directly opposite from the lot in question is the finest in the City

(2) 1883-10-16

E. B. Hubbard's
English and German Pharmacy
Cor. Washington and Market Sts.

Tiffin, Ohio. 188

It is just being completed and as several of our largest stockholders are members of the congregation, they agree to put off the dedication until December in order to have the Electric Light - While this will be no great object financially, yet as an advertisement it will be the very best we could have - But they fear the annoyance from the machinery and exhaust steam during services and will bitterly oppose the location of the Station at this point and we would at once make enemies instead of friends - Again we believe looking to the future growth of the plant, that this lot is too small for our purpose we believe it a wise investment to provide building room for a three

(3) 1883-10-16

E. B. Hubbard's
English and German Pharmacy.
Cor. Washington and Market Sts.

Tiffin, Ohio, 188

Thousand Light Plant though we use only one third of it in the start. He can put up a building forty (40) by sixty (60) feet in size, sixteen feet high, good stone foundation, twelve inch brick walls - asbestos shed roof finished as well as the one our Committee saw at Shamokin for not to exceed $1500, or any other form or size in proportion - At this rate we believe it unwise to skimp ourselves in building room - This lot too is at the southern limit of business and the population in the southern part of the City, with the exception of Monroe St, are mostly of foreign birth and for some time to come will use coal oil as a matter of economy. A large number of our Directors form

(4) 1883-10-16

E. B. Hubbard's
English and German Pharmacy.
Cor. Washington and Market Sts.

Tiffin, Ohio, 188

what is known as the Burns lot for the following reasons: we can get the East part of the lot on Rock Creek forty feet wide on Market Street, Seventy feet wide at the back end and One Hundred and Eighty feet deep for $1500. one half what the Freyman lot would cost - We could get our water for nothing, the Creek bank would afford a convenient dump free of expense for ashes Etc, for many years to come, we would have ample room, would annoy no one & it is only 800 feet from the center of City the present growth of the City is nearly all to the East and with the class of people locating there this lot would every year be getting nearer the center of business, if however

(5) 1883-10-16

E. B. Hubbard's
English and German Pharmacy.
Cor. Washington and Market Sts.

Tiffin, Ohio, 188

there are objections to this lot of which we are ignorant therefore Moore lot fronting on Washington St. would be our choice – price $3000.
Trusting that this will not be considered presumption on our part, but as a manifestation of our desire to secure for the Company the best location for the least money, we await your early reply – We desire very much to have the Edison Light burning in Tiffin at the earliest possible day – we will undertake to erect such a building as we suggested above in Thirty days or Twenty if necessary and if you will send us plans of what you think we ought to have looking to the future growth of our plant, we will begin work at once or if it is necessary

(6) 1883-10-16

E. B. Hubbard's
English and German Pharmacy.
Cor. Washington and Market Sts.

Tiffin, Ohio, 188

to have it done under your superintendence we will prepare to push the work as soon as he arrives – We think also that it would really be better to purchase the Burns lot entire as it will be profitable for us in the future and will cost us no more than the Tracy man property today – Yours respy –

J. M. Scammell. } Ex Com
E. B. Hubbard }

Form No. 1.

1883-10-17

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
217	Cok	6 PM	1287

Received at 852 BROADWAY. Oct 17 1883.

Dated Cincinnati O 17

To Thos A Edison 65 5 ave

Where is the tiffin estimate answer

A Stuart

Recy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-10-18

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
481	Cocm	12 M	

Received at 852 BROADWAY. Oct 18 1883.

Dated Cincinnati

To Thos. A Edison

65 5 ave

Where is the tiffin Estimate

why do you not ans our dispatches

A Stuart

RECEIVED
OCT 18 1883
ANSWERED
Oct 18 1883
FILE No.

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-19

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY,
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, Oct 19th 1883

Thos. A. Edison Esq
New York
Dear Sir

Your Tiffin estimate received to day with other papers have you not figured up very high on the start part of the installation, these estimates make me shake all over I am fearful of the result. They make our people awful uneasy,

Do you intend to make that trip out here & to Louisville if so about when, — How soon can we begin the house wiring in Tiffin I want to get at it while they are all anxious and before the Gas Co cuts the price any lower they are down to $2.25 now Yours Truly

A Stuart Sec'y

P.S. Mr Insull you did not send me that price list you promised — what are the facts about the Sunbury Stuart
Plant not paying

1883-10-21

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
53			2 3 pd	

Received at 852 BROADWAY. Oct 21 1888.

Dated Cincinnati O

To Thos. A. Edison

65. Fifth Ave or Residence my Tiffin Partiew here to Close Contract but there are Changes to make you will have to come to Cincinnati Will you Start today

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. A Stuart

1883-10-22

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
545			8 pd	

Received at 852 BROADWAY. Oct 22 1888.

Dated Cincinnati O 22

To Thos A Edison

65 - 5 Ave

Yes have him come to Close up Tiffin

A. Stuart

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-10-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED MESSAGE, and is delivered by request of the sender under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
88	Pry	O	129 paid

Received at 12 40 P. O CN 24 1883.

Dated Newyork 24

To Saml Insull Care A Stuart Cor 6th & Vine

Letter from Tiffin Committee distinctly says Burnn lot preferable new determination for twelve forty four lights on this lot mains run thought alley between Jefferson & Washington streets from Centre block eight to second alley block two thought alley between Washington and Munroe streets from river to second alley block one thought alley between Perry & Market from river to Centre block five thought alley

NUMBER	SENT BY	REC'D BY	CHECK
	Pry	O	

Received at O CN 24 1883.

Dated

To

between Market & Madison from river to Centre block three from intersection first alley in block two to one hundred feet other side Jefferson feeder one Centre block three feeder two Centre block five feeder three Centre block six feeder four Madison street at alley between Jefferson and Washington. Reductions based on estimate you took Station plan

THOS. T. ECKERT, General Manager.

NUMBER	SENT BY	REC'D BY	CHECK
	Pry	O	

Received at O CN 24 1883.

Dated

To

mailed today Conant letter not yet arrived

Tate

1883-10-24

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
116	Co Em	Ex Pd	

Received at 852 BROADWAY. Oct 24 1883.

Dated Cincinnati O

To Lopate
care Edison 65 - 5 ave

Stuarts last letter was about Sneaths lot in block three on Monroe Street are you sure new determination is on

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
116			

Received at 852 BROADWAY. Oct 24 1883.

Dated

To

Bunns lot think it should be on Sneaths lot give me limits new district wire fully is reduction Estimate made from one sent Stuart ~~are~~ or

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

NUMBER	SENT BY	REC'D BY	CHECK
116			

Received at 852 BROADWAY. Oct 24 1883.

Dated

To

That given me no use writing Stuart has no plan tiffin station neither have I this is too bad

Insull

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

from intersection first
alley in block ~~first~~ two
to 100 ft other side
of Jefferson - Feeder
one Centre block 3 - ~~to~~
~~Pumping lot~~ Feeder 2
Centre block 5 Feeder
3 Centre block 6
Feeder 4 Madison St
& Alley between Jefferson
Washington all
124 lights

Determination on Pump Col
main
through
alley between Jefferson
& Washington St from
Centre of block 8 to
second alley of block 2
through Alley between
Washington & Madison St
from River to second
alley in block 1
through alley between
Perry & Market from
River to ~~Pumping~~ Centre
of block 5 thru Alley between
Market & Madison from
River to Centre block three

58
Oct 27/83
S. Insull
to
Mr Pattee

Number of lights
4 7 5 3
96 lights

1883-10-24

Cincinnati

Pate, I find that the lot because for the central station is the corner of 10 Center in Block [illegible] — that is [illegible] the south east corner of the south west quarter of Block [illegible] The lot is 40 X 60 [illegible] should make another [illegible] of [illegible] on the [illegible] 1211 [illegible] Walnut and Campbell [illegible] another [illegible] It must be large enough to allow for an [illegible] 3200 light as the [illegible] will [illegible] that.

I have [illegible] $18000 — that is [illegible] the 8900 from the [illegible] installation [illegible] made a special [illegible] of $500 This contract will however [illegible] quite some time [illegible] as I am to make a bid for a large Building than that [illegible] in estimate to an [illegible] figure [illegible]

1883-10-24

Mamma Dearest—

Again I am hoping to close [illegible] long [illegible] [illegible] [illegible] home [illegible] on Saturday [illegible] [illegible] [illegible] know [illegible] check [illegible] $1000 from [illegible] which [illegible] check [illegible] Fall River for $4000 [illegible] for $2000 [illegible] check [illegible] [illegible] [illegible] [illegible] $4500 [illegible] [illegible] [illegible] [illegible]

[MEMORANDUM BY SAMUEL INSULL]

1883-10-24

Offer [illegible] on
[illegible] lot for 1200.00
Cable requires estimate
~~[illegible]~~ $3400.00

~~Offered on 100~~
~~cable requires [illegible]~~

[illegible] [illegible]
lot for 175 [illegible]
[illegible] on lot
$1047.00

[illegible]
[illegible] 1200
[illegible]
$3400

1883-10-24

[illegible] demanded on [illegible] lot
for 12 11 light value [illegible]
$3900 [illegible] demanded on [illegible] lot
for [illegible] light value $4000
demanded for [illegible] on [illegible]
lot [illegible] $1050
Louisville
Kansas

1883-10-24

With central station at center of Block 5. Mains should run in alleys as follows: North to river. South to fifth (5) alley in Block 1. West to river. East to center of Block 6. Thence north to center of Block 8.

Also from center of Block 3 west to river. East to center of Block 4 thence south to first alley in Block 2. Main cannot cross south half of Block 6 on account of new Court House now building there.

1883-10-25

Tiffin Ohio. Oct. 25th 1883

Thomas A. Edison
65. Fifth Avenue N.Y. Dear Sir

Enclosed I hand you Duplicate Copy of the Contract with the Tiffin Edison Electric Illuminating Company, of Tiffin O. duly signed by our President & Treasurer
Also Draft No. 40.592. Drawn by Our Commercial Bank, upon the 4th Nat. Bank of N.Y. to me And duly indorsed by me to your Order for the twenty five percent of the Eighteen thousand dollars, as provided in the Contract.
We will in all things fully and promptly perform our part, And hope our plant will be installed without delay — Dft $4500.00

We will get ready to ship Stock soon as may be And will then forward you amount as provided by the Contract — 30. percent.
We have Contract for Lot to be in readiness all cleared off by 31st inst when work can go right in

Be so kind as to acknowledge and oblige Yours

Warren P. Noble
Secy. T.E.E.I. Co.

[ENCLOSURE]

MEMORANDUM OF AGREEMENT made this 24th. day of October, 1883, between the TIFFIN EDISON ELECTRIC ILLUMINATING COMPANY, of Tiffin, O, hereinafter called the party of the first part, and THOMAS A. EDISON, of the City, County and State of New York, hereinafter called the party of the second part.

The party of the second part upon receiving permission from the Edison Electric Light Company of New York, agrees to furnish and install at Tiffin, County of Seneca, State of Ohio, for the party of the first part, an Edison Electric light Central Station Plant necessary to furnish a maximum of 1,000 lights of 10 candles each over a system of feeders and conductors as per the map hereunto annexed (marked Exhibit A and showing the feeders and conductors in red lines) for the sum of Eighteen Thousand Dollars according to statement of labor and material hereunto annexed (marked Exhibit B).

In consideration of the party of the second part undertaking to furnish and install said plant, the party of the first part hereby agrees to pay the party of the second part as follows:- Twenty Five per centum of the before named Eighteen Thousand Dollars upon the signing of this agreement, Fifty per centum of said amount when the installation is ready to supply light, and the remaining Twenty Five per centum after the system has been in successful operation for thirty (30) days, it being understood and agreed that such thirty (30) days operation shall be under the management and at the expense of said party of the second part.

It is further agreed that the title of the property covered

[ENCLOSURE]

1883-10-24

by this contract does not pass from the party of the second part to the party of the first part until all the terms of payment herein provided for shall have been complied with.

The party of the second part further agrees to use due diligence in putting into practical operation the said installation and to do all work in connection therewith in the best and most workmanlike manner and in compliance with the requirements of the Engineering Department of the Edison Electric Light Company of New York.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals the day and year first above written.

The Tiffin Edison Electric Illuminating Company of Tiffin, O.

By R. W. Shawhan, President.

(Signed) Warren P. Noble, Treasurer.

Thomas A. Edison,

(Signed) By Sam'l Insull,

Attorney.

1883-10-27

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President
H. WORTHINGTON, Vice-President

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati [illegible] 27" 1883

T. A. Edison Esq.
New York
Dear Sir.

I have [illegible] word from Tiffin that a check for [illegible] contract signed has been forwarded [illegible] & trust that all is satisfactory [illegible] you will send men on to begin [illegible] once.

This matter is very [illegible] to us as soon as it becomes known that [illegible] are at work, in Tiffin. it will [illegible] us very materially in closing [illegible] known. If there is anything on [illegible] Tiffin people that in any way [illegible] delay please let us know, at once.

The Co. is [illegible] & everything in readiness for you to [illegible] work.

Respy
A. [illegible] Secy.

[ATTACHMENT]

1883-10-29

Oct. 29th 1883

Sell lee [illegible] Ohio

To [illegible] C. S 4500.00

Payment [illegible] 29th

1883-11-03

OFFICE OF

The Tiffin Edison Electric Illuminating Company.

DIRECTORS

E. W. SCRIBNER, President, J. F. EDWARDS, Vice President, W. P. NOBLE, Treasurer, E. B. HUBBARD, Secretary,
A. SECREST, J. M. NELSON, M. SCANNELL, J. A. BEAIR, H. H. HOFFMAN.

Tiffin Ohio Nov 3rd 1883

Mr Edward Dowd
35 Fifth Ave New York

Dear Sir

I mentioned to you in Cincinnati that the M. E. Congregation of this place were just completing the finest Church edifice in the City. That a number of our best stockholders were members of that Church and were anxious to introduce the Edison Electric light if they could rely on getting it in time for the dedication. We would be credit most in the folders which would show the light to good advantage and at a time when it is important to have it on exhibition. Church lighting cannot be more desirable, directly, but most of it would be done at times when there is not a maximum of lighting elsewhere. So that taking it all in all we think it quite desirable to secure them as patrons; but to do so we request you then give assurance that they will not be delayed.

The Tilin Edison Electric Illuminating

[illegible]

1883 11-03

OFFICE OF

The Tiffin Edison Electric Illuminating Company.

DIRECTORS

[illegible] Vice President. W. P. Noble, Treasurer. E. B. Hubbard, Secretary,
[illegible]tor, M. Scannell, J. A. Blair, H. H. Hoffman.

Tiffin Ohio 188

[illegible] be reached from main
[illegible] strength from station, and such
[illegible] good lighting all along.
[illegible] further suggestions of this kind
[illegible] blue-prints, if you desired them.
[illegible] from you above, or better still
[illegible] representing you in Tiffin
Yours Respectfully
[illegible] Burns

1883-11-05

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
N	A		12 paid

Received at 1106a Nov 5 1883.

Dated, Tiffin O 5

To A Stewart Secy 2 Bradford Block

Edison people have not Begun work yet we are anxiously awaiting them

E B Hubbard

Receive this about noon day in the Average Statement

1883-11-06.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE**, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
227	Br	N Pd	149

Received at **852 BROADWAY.** Nov 5 1883.

Dated Cincinnati O 5

To Thos. A. Edison 65 fifth av

Why hasn't Tiffin work begun as promised such delays are ruinous.

A. Stuart Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

1883-11-08

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
213	gBh	gPaul	10¢

Received at 852 BROADWAY. Nov 8 1888.

Dated Leffin O. 8

To Saml Insull 65 = 5 arr

No plans or letters when were they sent answer

N D Rich

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

Tuesday Eight

DIRECT WIRES.

[TO C. H. CAMPBELL]

1883-11-13

Form II.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, Nov 13 1883

Campbell Giffin business will be seriously compromised if I cannot obtain at once the data necessary for me to have to enable me to issue orders for material

Edison

OK. Nov 13. by Estimate

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

1883-11-14

Form H.

New York, RECEIVED NOV 13 1883 188

ANSWERED Nov 14 1883

FILE No. 92-0911

Campbell / Please prepare

Tuffer data for

Mr Burrows -

Want this first thing

in morning

Talcp

OK Nov 14/83

1883 11-15

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER 331 | SENT BY M | RECD BY | CHECK 1472

RECEIVED NOV 5 1883 ANSWERED

Received at **852 BROADWAY.**

Dated Tiffin O 5 Nov 5 1883.

FILE No.

To Samuel Insull.

65 ~~Ant~~ 5 Ar

We want forty by Sixty building at a additional Cost Come at once Carry thing ready J F Burn Vice Prest

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883 11-16

WARREN P. NOBLE, President.

CAPITAL & SURPLUS $100,000.

THE COMMERCIAL BANK

S. B. SNEATH, Cashier.
JAMES A. BLAIR, Asst. Cashier.

Tiffin, Ohio Nov 16 1883

A. Stuart Esq Sec'y Insull —
Cincinnati

Since Dwelling don't want Walker better send him to Tiffin

Dear Sir
Your letter to Hubbard was shown to me. What we want is to have a man from the Edison Shop to be here and see to having the Houses wired. as the people are waiting on us and want to know why the man to wire the Houses & stores does not come. The Rich who came here and made a contract to fix up the building & said he would have a man come on and wire

the House & Store. But the
man does not come. The
next same man from
Eclesian works to be here
and attend to business.
is a business ~~man~~ like
boy, Hoping you will
see that Eclesian has
a man come to Corin
and attend to business

Yours truly
James A. & Brown

Mr. T. Griffith
Corinth
Miss

1883-11-23

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Safety Catches

New York, 23rd November 1883.

Tiffin - Ohio.

		Number of Safety Catches	Size of feeder or main in F.W.G.
At feeder 1.	for feeder 1.	3	# 1
	" main 1-F.	3	# 8
	" " 1-G.	3 each	# 5
	" " 1-A.	3	# 0
	" " 1-Z	3	# 8
At feeder 2.	for feeder 2.	3	# 1.
	" main 2-1	3	# 8.
	" " 2-E	3 each	# 8
	" " 2-H.	3	# 1.
	" " 2-C	3	# 0.

Re fuse Wire. 30.

3 Safety Catches at foot of each feeder 6 "

Total number of Safety Catches, 36 "

order 450.
Nov 23/83

Form No. 1.

1883-11-28

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
607			

Received at 852 BROADWAY.

Nov 11 1888.

Dated Tiffin Ohio

To Sam'l L. Insull
65 Fifth Ave

Here is a Church Committee wishes to know the discount on fixtures as mr Shaw informed them it would be

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-11-28

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
607			

Received at 852 BROADWAY.

Nov 11 1888.

Dated

To

Thirty five per Cent Bergmann and Co writes it will be fifteen per Cent please inform me at once and oblige

J. B. Walker

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-30

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio, Nov 30th 1883

Mr. Thos. A. Edison
65 Fifth Ave. N.Y.

Dear Sir;

Your Mr. Walker has been here several days and has conferred with quite a number of our people in regard to seeing their respective places of business etc. He has shown your new Paragon Wire and our people are very much pleased with it. He has stated the case to them as regards Insurance etc. Nearly all prefer to have this wire on account of its superiority in finish etc., and are willing to take their chances on its being approved by the Underwriters, or on any danger there might be from the use of it.

1883-11-30

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio, 188

As our time is very short we hope you will at once give your directions to have the wire used here in all places where the customers are willing to take any chances there may be in connection therewith.

Respectfully Yours
J. F. Bunn
Vice Prest.

1883-11-30

WARREN P. NOBLE, President.

CAPITAL $100,000.

THE COMMERCIAL BANK

S. B. SNEATH, Cashier.
JAMES A. BLAIR, Asst. Cashier.

Tiffin, Ohio Nov 30 1883

Samuel Insull Esq
Mr. Gould

Dear Sir

Arrangement now made by Mr Stewart of Cincinnati O by which the Machinery for our Edison Electric light Co was to be shipped via the Star Union fast freight line. This is the line we want it to come by on account that Pennsylvania Co which line the Star Union freight comes to our City prefers to use the Edison light. And they give us good customers of ours, and this is the reason we want the Machinery

shipped via this line. and I wrote a good Mr Stewart letter to the Star Union agent at this place and they said you had ordered shipped via this line. So I hope you have or will ship the Machinery by this line. Do Star Union Fast Freight Line

Yours truly

James A McCain

Director of the
Tiffin Edison Electric
Light Co

1883-1204 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

RECEIVED DEC 7 1883

~~New York,~~ Toledo Ohio Dec 4th 1883

Samuel Insull Esq

Dear Sir

Arrived here Tuesday evening, called on Judge Bunn Wednesday - but as he had gone to Toledo could not see him untill Thursday - meantime I called on a number of applicants for the light, they all wanted the new wire and were willing to run the risks of insurance. I have finished wiring three places, and there are over thirty others awaiting me. The Pastor of the M. E. church of this place left here this evening for N. Y. to select fixtures for the church; we decided it would be better for some prominent member to go on as it would be more satisfactory to all. Send as soon as possible, one or more experienced wireman as it is necessary I should have

1883-1204 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, 188

them in order to push the work through in time for the opening of the Station, It is very difficult to get any here that are of any account, excepting two of the plumbers men.

Before leaving N. Y. you spoke of sending papers giving full particulars of how to make out a bill for wiring, as yet I have received nothing. the first question that is asked is, how much is this wiring going to cost independent of the fixtures, Neither have I received the "wire gauge" for calculating inside wiring. The goods I ordered before leaving N. Y. were here awaiting me - all correct excepting there were no cleats, which I needed badly. I telegraphed direct to Bergmann & Co for; also for the new cutout with attachment plug for flexible drop-lights.

1883-12-04 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

If they have not been, I will get them done with the enclosed power.

Will I use the time cards as the foreman of the Central Office for sending in the time of the men on different jobs? and shall I keep my time separate on each job? If so, send cards and the amount to charge per hour for each man, will I charge the parties who are having the light, the same as we pay the men?

Yours very Respt
D. C. Parker

1883-12-04

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio Dec 1st 1883

Mr Thos A Edison
65 Fifth Ave. N.Y.

Dear Sir:

This will introduce to you Rev. J. S. Reager, Pastor of the M. E. Church of this place. He is visiting New York for the purpose of buying, under Electric Light at Gas Fixtures for a new Church which his congregation is just completing here.

When Your Mr. Shaw was here he procured a number of the prominent members of Rev. Reagers Congregation as an inducement to their taking stock in the Edison Illuminating Co., that they should get a discount of 35% on fixtures for their Church.

I do not know what authority Mr. Shaw had to make promises

1883-12-04

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio 188

for Bergman & Co., but the refusal of the latter to carry out the promise has naturally created some dissatisfaction.

If you can do anything to secure the introduction of Electric Light, instead of Gas, into this Church, we think it would be a good card for our Company as well as for the Edison System in this part of the Country.

Very Respectfully Yours

J. F. Bunn

Vice Pres't Tiffin E. I. Co

2883-12-06

Niagara Dec. 6/89

Olsen & Co

To Daniel Scholtz

To Balance on Settlement with W.D. Sick	550.00
To Sand & Cement Laying Engine Bed	4.50
To digging foundation & cleaning Cistern	1.50
To Cooking after mechanics	2.00
To fixing Stone on Steps in front	5.75
To Cutting down wall & laying in lime	1.75
To laying Tile in drain	1.50
To lime for white washing	1.75
To Cooking	2.02
To fire clay	1.75
To Sand & Cement Boiler room	16.50
To Engine & Boiler	214.20
To laying 2374 fire Brick	5.47
To Sundries	4.50
	$615.09
Paid Dec 27 - as per order —	100.00
Now Due	515.09

Approved
A.T. Trust

1883-12-07

T. L. Form 3. 2,500,000-5-4-88.

BALTIMORE & OHIO TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message.
Errors can be guarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

GEORGE P. FRICK, President. **R. STEWART, Superintendent.**

NUMBER.	SENT BY.	RECEIVED BY.	TIME.	CHECK.
4	Va.	M	10:30	28 55 S 4

Dated Tiffin O. 7 Rec'd at SINCLAIR B'WAY & 8TH ST. Dec. 7 188

To Saml. Insull
65 Fifth Ave. N.Y.

With my order of the fourth send seven bbl. and good cedar for Paragon Cable and more like twenty four bbl. to Sunbury send thirty five to Shamokin.

J. C. Walker.

THE SUN JOB PRINT. ☞READ THE NOTICE AND AGREEMENT AT THE TOP.

1883-12-10

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an **UNREPEATED MESSAGE**, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
78	Co Em		

Received at **852 BROADWAY.** Dec 10 1883.

Dated Tiffin O.

To Mrs. Insull
65 - 5 Ave

I am waiting for players send immedy. by Express

J. Hibler

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883 12-10

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio Dec 10th 1883

Mr. Samuel Insull
65 Fifth Ave N.Y.

Dear Sir,

Your favor of the 9th inst received and I judge from its contents that you are laboring under some misunderstanding. We never had any other idea about the inside wiring than the one you suggest, viz that it is the business of Plumbers and that the local Company should have nothing to do with it. Mr Heller is teaching our Plumbers etc.

At the suggestion of Mr. Stuart we (the local Co.) have offered to pay part (one dollar for each good light) of the expense of this wiring up to January 1st

We believed with Mr Stuart that $400 or $500. spent in this way

1883-12-10

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio 188

would be a profitable investment. Mr. S. is of course anxious to make this plant a commercial success from the very start

I judge from comments made by Mr. Edison on a letter written by me to Mr. Stuart Nov 20th in regard to wiring Blocks 44, 46, 47, 48, 49, that he also was laboring under some misapprehension. We are unable to infer what local people are doing that it will take years to undo etc.

It was understood, I think, when contract was signed, between yourself on the one hand and Mr. Stuart and myself on the other, that you should at once give us your estimates for wiring these 13 blocks or specification so we could do it ourselves.

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

1883-12-10

Tiffin, Ohio ..... 188....

Some time thereafter I wrote you in regard to the matter and received in reply a letter dated Nov 9th and signed by Mr. Edison himself, saying these estimates would be sent to Mr Stuart. Afterwards when Mr Ricl was ordering poles and the price depended on taking car-load lots we felt justifiable in saying to the dealer to get two car loads and if Mr R. did not want all of them now they would be wanted soon. As your Mr. Tibbles used all but 7 or 8 our Executive Committee who ordered them is amply responsible for the same.

Now we admit we do not know anything about Electric lighting, but we do believe that if we

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

1883-12-10

Tiffin, Ohio ..... 188....

can get as many, or more, good customers by going fifteen hundred feet South or West, as by going the same distance South that it is business to go there. As we anticipated we are getting more applications for wiring private residences in Blocks 44, 46 & 49 (with 50) ~~to~~ in the Blocks to the South of Madison St. to say nothing of the Depots and Public Park (Bru Hall) which burn lights long hours in succession. We believe also that these Blocks could be wired cheaper now, when your men are here and could do it, than hereafter. We are not particular about estimates - trusting that your charges would not be unreasonable

1883-12

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio ..... 188..

After consulting with Mess Baxter & Brown as to the prices they would charge our patrons for their labor, etc, and receiving from them assurances which will be ~~to the~~ satisfactory and advantageous to all concerned, I take pleasure in recommending them to you, and have no doubt your relations and dealings with them will also prove satisfactory.

Very Truly Yours.

J. F. Bunn

Vice-Presid Tiffin S. Co.

1883-12-11

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

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THOS. T. ECKERT, General Manager. WORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
413	W	M	Zy	Pd

Received at 852 BROADWAY.

Dated Cincinnati O Dec 11 1888.

To Thos A Edison 65-5 Ave

Ship immedy. to Tiffin All Necessary materials and instructions for Wiring blocks Forty Four Six Seven and nine this should be done at once - H H Hoffman

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES. Grant A. Stuart Secy

1883-12-11

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

The Edison

Cincinnati, DEC 11 1883

Thomas A. Edison, Esq.
New York
Dear Sir:

We wired you today asking you to send the materials & instructions for wiring Blocks 44-46-47-49- Tiffin. This is done at the urgent solicitation of our Tiffin Company, who in our correspondence with them, have certainly adduced strong arguments in their behalf.

We view this slight difference of opinion with great regret. When Mr. Insull was here he took back with him a Blue Print of Tiffin with these blocks marked, promising to send us an estimate for cost of poles, mains, &c. Mr. Rich tells the people at Tiffin he understands it will not increase the cost of feeders to make this extension, so, in view of all the facts, if the Tiffin Company want this work done, it seems to us that it should be done at once.

I cautioned the people very minutely about their arrangements with consumers. Their understanding must be very explicit & distinct.

As this is our first Ohio Central Station, and bids fair to be a very successful one

1883-12-11

THE OHIO EDISON
ELECTRIC INSTALLATION COMPANY.
OFFICE:
Room 2, Bradford Block,
N. W. COR. SIXTH & VINE.

H. H. HOFFMANN, President.
H. WORTHINGTON, Vice-President.

A. STUART, Secretary.
JAS. SPILMAN, Treasurer.

Edison's Incandescent Light.

Cincinnati, ... 188

unless a small matter like this is permitted to endanger it, and as your presence will be our most valuable aid in starting successfully. I respectfully ask that you arrange to meet me in Tiffin when the plant is ready to start. You can then lay out a business programme on which they can work. This will settle all differences and insure success.

Respectfully.
A. Stuart. Sec.

P. S.

The blank contract for Piqua sent us was used for the Middletown Plant. Will you please fill up & execute one for Piqua on the basis agreed on, & send us in duplicate? We have no other blank forms.

A. S. Sec.

1883-12-12

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Write say am very much gratified that they have made arrangements with the outside parties -

Tiffin, Ohio Dec. 12th 1883

Mr. Samuel Insull
65 Fifth Ave. N.Y.

Dear Sir:

When your Mr. Walker came here I introduced him to Mrs. Baxter Brown. They are the best men in the plumbing business here and are responsible as well as reliable.

They have been working with Mr. Walker at inside wiring, but as the local Company was not supposed to have anything to do with this part of the work we did not inquire into the arrangements he might make with them.

Yesterday Mr. W. called upon us to name the men who should have control of this branch of the business for Tiffin

1883-12

OFFICE OF

Probate Court,

SENECA COUNTY.

J. F. BUNN, Judge.

Tiffin, Ohio 188

We would also call your attention to the fact that our contract with the Carbon Company calls for an investment of at least $20,000. within 90 days from the signing thereof.

Why then can you not send the men and have this done for us?

Yours Respectfully Yours.
J. F. Bunn
Vice Prest.

In great haste
B.

1883-12-12 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

~~New York,~~ Tiffin Ohio Dec 12th 1883

Mr Samuel Insull N.Y.

Dear Sir.

In reply to yours of Dec 7th received today, I have been doing just as you say in your letter, in regard to the wire work; as they wanted the work pushed ahead as fast as possible, and you suggested me bringing one man with me, is what led me to send for one. There had been no Plumber accident up until to-day, I have kept an account of all the material that has been used, also the time of each man, furnished by Batter & Brown, (the Plumbers appointed to day) I have had no other men, I have not spoke for any of the work, as they expected to be appointed and the work made to them. Judge Burn has written you to-day in regard to the matter. I think now would be as good time as any, to turn it over to them.

As Batter & Brown have been appointed, I do not know that it is necessary to have any time sheets filled up.

Considering the help I have had, I think we are getting on well with the work, have thirteen places wired, that will amount to 105 lights.

In addition to the lamps furnished with ~~such~~ the Plant Judge Burn wishes me to send this order to be filled.

20	doz	10	Candle
10	"	16	do
1/2	"	32	do
1/2	"	50	do
1/4	"	100	do

Yours Very Respt
J. C. Walker

1883-12-12 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

1883-12-12

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
188	Mg	Cm	14 Pd

Received at 852 BROADWAY.

Dated Cincinnati Ohio Dec 12 1888.

To Thos. A. Edison N.Y.
65 Fifth Ave

Send Material for Tiffin Extension Immediately Without Estimate We understand this ~~[illegible]~~ Work is Extra

A Stuart Secy

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-12-13

Write & say that I have no voice in the matter - local parties do the wiring & B & Co will not go lower I should call on Mr Shaw to make good his guarantee this will reduce the profit to the point where you wanted it.

Tiffin O. Dec 13th 1883

Mr Thos A. Edison
65 5th Ave N.Y.

My Dear Sir

with a very polite -

On my arrival at home I find considerable dissatisfaction at my action in contracting with Bergman & Co for our fixtures for the Church here, A letter came from Mr P.B. Shaw to Judge Bunn in my absence dated Dec. 6th in which he says in regard to discount to us, "My recollection is that I offered 30 pc off from price list and promised the additional 5 pc provided I could secure it now the M.E. Church may order their fixtures and I will guarantee the discount of 30 % from the list price as quoted by Mr Bergman in his Catalogue". All the goods that I selected were put to me at the highest list price. The Committee feel than they have not been just honorably dealt with and are displeased to seriously

1883-12-13

object, the figures at which I contracted with Mr Bergman & Co makes our fixtures cost us about $70 more than the gas fixtures would have cost all in and ready for use and that included in the gas 2 handsome lanterns for vestibules billed at $4.5 each I am not disposed to "go back" on my contract with Mr Bergman but I think in justice to us and to set me right with the Committee, you ought to assume the expense of wiring the Church or make a Rebate of $70 on the Bill, that would make our electric fixtures cost just the same as the gas (with the lanterns left out of electric fixtures) that is to say the Gas fixtures including lanterns would cost just the same as electric fixtures without lanterns, I hope this suggestion will meet with your approval and that this whole business can be settled to the satisfaction of this Committee who ask nothing only that which was voluntarily promised them, please let me hear from you as early as convenient

Truly Yours
Jas S Reager
Pittsfield O.

Dec/31/1878.

1883-12-14 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

~~New York,~~ Milan Ohio Dec 14 1883

Mr Samuel Insull N.Y.

Dear Sir

Enclose please find an order for material for the M.E. Church of Milan. Will you please send by Express so that I may receive it as early as basible.

I order this number of Plugs so as to have extra ones if needed.

Yours Very Respect-
J. C. Walker

1883·12-17.

T D FORM 3. 1883-12-18 2,500,000-5-4-83.

BALTIMORE & OHIO TELEGRAPH COMPANY.

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GEORGE P. FRICK, President. **R. STEWART, Superintendent.**

NUMBER.	SENT BY	RECEIVED BY.	TIME.	CHECK.
38	Bm.	M.	3.20	10 Pd. 40

Dated Tiffany O. Dec 18 Rec'd at SINCLAIR HOUSE BWAY & 8TH ST. 188

To T. A. Edison
51 Fifth Ave.

Will not be ready to leave until after Jany. first.

J. C. Wilkers

THE SUN JOB PRINT. READ THE NOTICE AND AGREEMENT AT THE TOP.

1883-12-18

T. D. FORM 3. 2,500,000-5-4-83.

BALTIMORE & OHIO TELEGRAPH COMPANY.

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GEORGE P. FRICK, President. **R. STEWART, Superintendent.**

NUMBER.	SENT BY	RECEIVED BY.	TIME.	CHECK.
47	W.	M.	5.23	14 Paid 52

Dated Tiffany Ohio. Dec 18 Rec'd at SINCLAIR HOUSE BWAY & 8TH ST. 1883

To Samuel Insull
65 Fifth Ave.

Where is my order of the fourth have not fixtures to go ahead with

J. C. Walker.

THE SUN JOB PRINT. READ THE NOTICE AND AGREEMENT AT THE TOP.

Form No. 1883-12-19

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case where the claim is not presented in writing within thirty days after sending the message.
This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.
THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
233	on ir	2 paid	nm

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Dec 19 1888.

To Thos A Edison
Tiffin Oh
65 fifth ave NY

Hibler says he has no material or directions about service wiring whose business is this and what is to be done

J F Bunn

1883-12-19 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

~~New York,~~ Tiffin Ohio Dec 19th 1883

Thos. A. Edison Esq
N.Y.C

Dear Sir.

Yours of the 16th just received, in reply would say of the "Pole-line work" – as far as my judgment goes, I have noticed that Mr. Hibler's work has been carefully done, has been pushed ahead as fast as possible, and looks very substantial. I have finished wiring twenty places, that will average about eight lights each, and have commenced the M.E. Church, will take about five days to complete the wiring; It is all concealed work, & I thought best to use a cutout for each fixture, have wired the upper row of single fixtures to be switched out with the chandelier, the rest are to be without any switch, as they will be left burning during the entire service,

1883-12-19 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

It is a very fine church for this place, and I think being lit as it will be, will be the greatest card for the Edison Light in Tiffin. Application has been made for two or three other churches. People here are very enthusiastic over the "Light" and all want their work done first.

Butler & Brown (the Plumbers appointed by the Co). I think will be very apt hands at the business, they seemed rather slow at first to understand it, which hindered the work for a time, but are now doing very well.

Yours very Respt
D. C. Walker

1883-12-19

OFFICE OF

The Tiffin Edison Electric Illuminating Company.

DIRECTORS

R. W. SHAWHAN, President, J. F. BUNN, Vice President, W. P. NOBLE, Treasurer, E. B. HUBBARD, Secretary,
A. STUART, J. M. NAYLOR, M. SCANNELL, J. A. BLAIR, H. H. HOFFMAN.

Tiffin, Ohio, Dec 19th 1883

698 12/21/83

Thomas A Edison Construction Dept.
65. Fifth Avenue, New York

Dear Sir:

You will send us at once without delay the following lamps.

20	80z	10	Candle
10	"	16	"
1/2	"	32	"
1/2	"	50	"
1/4	"	100	"

Yours truly
The Tiffin Edison Electric Illuminating Co
E. B. Hubbard
Secy

If shipped by freight, be sure and ship by "Star Union Line" E.B.H.

1883-12-21

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission, nor in any case where the claim is not presented in writing within thirty days after sending the message.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
B443	rt	Bd S Paul	nite

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, Dec 21 1883.

Dated Tiffin O 20

To Thos A Edison

65 fifth avenue

If not shipped send lamps ordered by express

E B. Hubbard Secy

1883-12-21

OFFICE OF

The Tiffin Edison Electric Illuminating Company.

DIRECTORS

R. W. SHAWHAN, President, J. F. BUNN, Vice President, W. P. NOBLE, Treasurer, E. B. HUBBARD, Secretary,
A. STUART, J. M. NAYLOR, M. SCANNELL, J. A. BLAIR, H. H. HOFFMAN.

Tiffin, Ohio, Dec 21st 1883

Thos. A. Edison
Construction Dept. 65 Fifth Avenue
New York

Sir

We have just been informed by your Mr Walkin that the goods he ordered on the 4th inst. will not be shipped to our local Blanks (Boxlin & Brown) but that you must receive an official order from our Co, why this is so he is unable to tell. You will therefore send us at once by B & O Express the following goods

500. No 18 4p Assorted wood Cleats
100. New Cut outs, with attachment plugs for drop lights
100. No 98. One light attachment for gas burners, including key socket
~~1. Coil No 16. Paragon Cable~~
~~2. " " 14 " "~~
~~2. " " 12 " "~~
~~100. V. No 44. branch cut out for Paragon Cable~~
~~50. V " 45 Main line " " " "~~
~~200. Assorted Plugs " " "~~

12 - 12/14

1883-12-21

OFFICE OF

The Tiffin Edison Electric Illuminating Company.

DIRECTORS

R. W. SHAWHAN, President, J. F. BUNN, Vice President, W. P. NOBLE, Treasurer, E. B. HUBBARD, Secretary,
A. STUART, J. M. NAYLOR, M. SCANNELL, J. A. BLAIR, H. H. HOFFMAN.

Tiffin, Ohio, ... 188

200.	No. 195.	Porcelain Shades 10 in. flat	728
200.	" 201.	" " Holders 3¼ in.	728
100.	" 2.	Key Sockets with rubber tops for flexible wire.	
1½	Doz No 3.	Receptacles. Standard	
1½	" No 4.	Attachment Plugs,	
200.	feet.	Flexible Cord for Plugs	
1½	Doz	Hook Sockets including Key	
~~300.~~	~~No 181.~~	~~Capped Safety Plugs for No 1. Cut outs, assorted sizes~~	
~~4.~~	~~No. 210.~~	~~Standard Switches.~~	
4.	No. 212.	do	do
2.	No. 215	do	do
1.	No. V. 7.	Bracket (Bronze) with Key Socket	
2.	No V. 43.	Double Swinging Side Bracket with Key Socket (Bronze)	
3.	No V. 40.	" " " (Bronze) " "	
2.	No. 155.	Spike Sockets ~~Gold~~ Bronze " "	
6.	No. 135.	Stand " Bronze " "	
1.	Cigar Lighter with attachments complete		
6.	Doz Lamps 16. Candle - Nolord -		
1	No. 930.	Branch Cut out.	
~~1.~~	~~No. 960.~~	~~Main Line " "~~	

1883-12-21

OFFICE OF

The Tiffin Edison Electric Illuminating Company.

DIRECTORS:

R. W. SHAWHAN, President, J. F. BUNN, Vice President, W. P. NOBLE, Treasurer, E. B. HUBBARD, Secretary,
A. STUART, J. M. NAYLOR, M. SCANNELL, J. A. BLAIR, H. H. HOFFMAN.

Tiffin, Ohio, 188

1. 1 lb Tape 1729 12 29
2. Sockets for 50 Candle Lamps - if necessary
2 do " 100 " " " "

We want these goods at the earliest possible moment - please hurry them forward by Express

Yours truly
The Tiffin Edison Electric Illuminating Co
E. B. Hubbard
Secy

1883-12-21

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

~~New York,~~ Tiffin Ohio Dec 21 1883

A. O. Tate Esq
Dear Sir -

Yours of the 19th just received, As I had no instruction before leaving N.Y. as to how I should turn the matter over to the local parties here, I supposed that after the Plumbers were appointed by the Co, orders that I sent would be billed to the Plumbers, & on my leaving I was ready to turn it over, I went the business part, so that the materials orders could be billed to them. On plain work I think the parties could get along, but on the kind of work, we are now doing on the M.E. Church, it would be impossible for me to leave at present. By the goods not coming, the men no nothing about putting on the fixtures. I will notify the Tiffin Co at once, in reference to goods ordered, I will let you know at once, as soon as they are capable of taking charge of the work - Enclosed please find Judge Burns letter that you wished returned. Yours Very Respt

A. O. Walker

1883-12-22

Tiffin Ohio December 22d 1883

Edison Electric Light Co
To Irving Hibler Dr

Nov 22	Car fares For myself and one		$ cts
	From Newyork to Tiffin at 15.70 per fare two		31 40
"	23 6 meals on road thirty five cts per meal		2 10
"	24 2 meals at mansfield ohio		1 00
	Tools Purchased		
Dec 3	1 hatchet		1 25
"	10 1 Pair Pliers		90
	Repairs on Tools		
"	4 Selling and Filing Saw		25
	1 Two foot rule		25
	1 Carpenters Lead Pencil		05
	Repairs in Sharpening 6 Steel Bars		1 00 ✓
	Climber Shaps		50 ✓
	Repairs on Wire Reel		4 00 ✓
	Express Charges		
Dec 5	Two Sacks Brackets - Cod		4 55
"	16 One pair Pliers B&O Express		25
Dec 17	Three Suits of Overhall & Jackets for men to use in Painting Poles		3 00 ✓
Dec 1 to "	24 Paid out For Telegrams During Month of December		2 80
Nov 26	Board Bill For Self and men		
"	To at L. L. Lang - Tiffin Ohio		54 35 ✓
Dec 24	" " " " " "		
Dec 22	Car fare from Tiffin Ohio To Bellefonte Pa		11 51
Dec 23 & 24	Expenses for meals and lodgings		2 50
			126 96

Direct to Pitt

T. D. Form 1.

1883-12-25

HALF-RATE MESSAGE.

BALTIMORE & OHIO TELEGRAPH COMPANY.

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Errors can be guarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delays in transmission or delivery of UNREPEATED MESSAGES.
This message is an UNREPEATED MESSAGE and is delivered by request of the sender under the conditions named above.

R. STEWART, Supt.

NUMBER	SENT BY.	TIME.	RECEIVED BY.	CHECK.
76 B	X	1603	O	1 2 3 5 2 0 1/2

Dated Jeffers O 25

Rec'd at

Dec. 25 1883

To Mr A Edison

65 5th Ave NY

No instructions yet regarding Service

Wire No Electricians here why

this delay

E B Halsted

Dear

READ THE NOTICE AT THE TOP.

1883-12-29

Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, beyond a sum equal to ten times the amount paid for transmission, nor in any case where the claim is not presented in writing within sixty days after sending the message.
This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
144			19 paid note

Received at the WESTERN UNION BUILDING, 195 Broadway, New York, 188 29 1883

Dated Tiffin O 29

To Thos A Edison

65 - 5 aveny

Hurry forward by adams express immediately flat safety catcher for feeders switche & feeders also service wire & sockets

W S Andrews

Safety catcher for main & feeder stations 12/27 Forward as requested W S Andrews

1883-12-29

T. D. Form 3. 2,500,000-5-4-83.

BALTIMORE & OHIO TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message.

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This is an UNREPEATED MESSAGE and is delivered by request of the sender, under the conditions named above.

GEORGE P. FRICK, President. R. STEWART, Superintendent.

NUMBER	SENT BY	RECEIVED BY	TIME	CHECK
37	Ja.	Ch.	5.48 P	28 Paid 79

Dated Tiffin O. 29

To Thos. A. Edison

65 Fifth Ave.

SINCLAIR HOUSE,

Rec'd at

December 29 1883

Every thing is going on nicely hope to light up next sunday shall forward same pere meter lamps for indicators and blanks of test lamps.

Lamps 12/17

Sockets 12/17

W. S. Andrews.

THE SUN JOB PRINT. READ THE NOTICE AND AGREEMENT AT THE TOP.

1883-12-30

Form L. 2000-12-7-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Write him & say that the Manager of Labor meta charge of yet 50 per month & the Edison Co

Dillon Dec 30 /83

~~New York,~~ 188

Thomas A. Edison Esq

that all that can be paid

Dear Sir

Don't want any extra for management

Friday afternoon we ran the Dynamos for several hours and found them in good condition. I send you some Dillon papers giving a brief account of the trial. I find that there have already been wired houses for about 250 lamps, with what discrimination as regards revenue to be derived from them I am as yet unable to say. The new church is wired for 44 lamps of 16 c.p. and Walker has made a very neat job of it. They wish to dedicate this edifice on Sunday next and I think we shall be able to light them up.

Beside the things telegraphed for by Mr. Andrews there are yet to come Meters and Sulphate of Zinc. Please ask Mr. Jail to send forward my speed indicator and blow lamp. ei

1883-12-30

Form L. 2000-12-7-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

soon as possible. We have secured a meter-man and an engineer.

Owing to several necessary changes in the plan of the station, we shall be unable to adhere to the original arrangement of inside wiring. This however will cause no delay in starting the plant.

Yrs. &c.

Thomas P. Sprague.

1883-12-30 Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Office O. Dec 30th 1883

Address reply to

Thos. A. Edison Constr Dep't
New York

Dear Sir

Will you kindly order forward to Office from Edison Machine Works two rails with bell lighteners attached for "Y" Dynamos two short ones have once more been shipped here by mistake as they were to Fall River. The rails of machine are all right

Yours truly
W. S. Andrews

Mr Edison This thing is getting

monotonous

Tale

1883-12-30

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

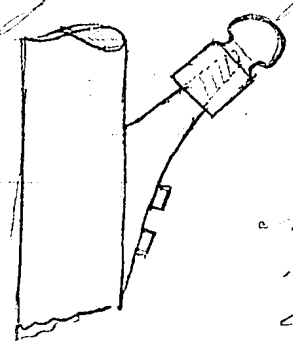
Address reply to

Tiffin O. Dec 30 1883

Thos. A. Edison Esq
New York

Dear Sir

I notice that in some of our pole lines on this place, the insulators are screwed on to short supports that project out from poles at an angle thus:



I am told that very heavy sleet storms are common in this section of the country and if a wire becomes very heavily loaded up with ice it seems to me that this arrangement is hardly safe for if one of these should give way the wire would at once drop heavily and probably tear the others loose all down the line. I think that another insulator should be attached to poles one quarter way around, and the wire tied to it, so as to give it a double support

Yours truly
W. S. Andrews

I have already bound one of the above tricked wires around the end of our line simply by the weight of copper

1883-12-31

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Office Dec 31st 1883

Address reply to

Thos A. Edison Const Dept
New York

Gentlemen —

Referring to your favor of the 28th inst respecting bill rec'd herewith — I would ask you if the two Spare "5" Dynamos at Lawrence Station are included in contract. Also the resistance boxes for regulating them are of course included also. But if the Dynamos were ordered by L. Co. apart from contract, then of course both Dynamos and regulators therefor must be charged on separate account.

Your second favor of the 28th inst also rec'd in which you write of telegram from Sec'y of Office, &c in re [illegible] Will Counsel with me all that concerns in this matter by way of giving all necessary instructions to local people. Yours [illegible]

1883-12-31

Form H. H.-1000-12-3-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS.
CHIEF ELECTRICAL ENGINEER,

Sifferin Pa. Dec 31st 1883

Address reply to

Thos. A. Edison Constn Dept
New York

Dear Sir

Station is being pushed ahead in good style, and we shall be all ready to light up next Saturday or perhaps before, but as yet no sockets for outside work have come to hand and people here are getting very impatient about it, so I have just telegraphed to you about it, and trust they will soon turn up — Moreover we have no temporary fixtures, — Had the material been on hand we should have been able to have turned on two or three hundred lamps next Sat.y Does Mr Edison intend to come on here to start Station?

Yours truly W. S. Andrews

1883-12-31

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

Form H. H.-1000-12-3-'83.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Schenectady Dec 31st 1883

Address reply to

Thos. A. Edison Esq
New York

Dear Sir

Schenectady people are very anxious to know if you are coming here — They would like to see you when Halpin is states next Saty if you can make it convenient

You could leave Utica by the RR Friday morning and get here Saty morning or leave Utica Friday evening by the Erie R.R. and get here Saty morning. I shall probably leave here tomorrow for Mount Pleasant

Yours truly

W. S. Andrews

1883-12-31

Form H. H.-1000-12-3-'85

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,
NEW YORK.

W. S. ANDREWS,
CHIEF ELECTRICAL ENGINEER,

Jeffersonville Dec 31st 1883

Address reply to

Mess. T. A. Edison Constr. Dept
New York

Gen. Sirs,

Dr Hubbard of this place has asked me to write to Messrs Bergmann & Co about a particular kind of lamp socket that he wishes to put over gas fixtures in his store, so I send in letter enclosed which if it meets with your approval, kindly pass on to Messrs B & Co—

Dr Hubbard as you know is actively interested in Elec. Lt. matters in this place and was one of the committee appointed to go to New York to investigate previous to the formation of Jeffersonville Co— so I have thought it worth while to ask your in this matter.

Very truly Yours
Geo. S. Andrews

Form No. 1.

1883-12-31

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an **UNREPEATED MESSAGE**, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
355	GB	O	1 6

Received at **852 BROADWAY.** 1/57 12/31/83 Dec 31 1888.

Dated Tiffin Ohio 31

To Thos A Edison 65 5 ave

Order forward by express immy one of Krensis napthia Blow lamps for soldering poles lamp connections W. J. Andrews

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Form No. 1.

1883-12-31

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
357	GB	G	1 0 fd

Received at **852 BROADWAY.** 100 Dec 31 1888.

Dated Tiffin Ohio 31

To A. O. Tate 65 5 ave

Express one no nine hundred & sixty main light [redacted]

Baxter & Brown

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

(1883)

T. D. Form 1.

NIGHT MESSAGE.

BALTIMORE & OHIO TELEGRAPH COMPANY

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This Message is an UNREPEATED MESSAGE, and is delivered by request of the sender under the conditions named above.
GEO. P. FRICK, President. R. STEWART, Sup't.

NUMBER.	SENT BY	REC'D BY	TIME.	CHECK.
7	Sm.	M.	8.55	45 Paid 50 1/2 Rate

Dated Toffin Ohio 31st

To Thos. A. Edison

Rec'd at SINCLAIR HOUSE, B'WAY & 8TH ST.

188

65 Fifth Ave.

Shall be all ready to light up by Saturday but no sockets or temporary features are course to hard - cannot understand this delay wire reply saying if sent sent and how, send without fail by first express if not already expressed how was service wire forwarded

Read the Notice at the W. Union

Form H.

1883-12-

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

~~New York,~~ Tiffin Ohio Dec 1883

Mr S. Insull

Dear Sir.

This will introduce to you Rev. Reggan pastor of the M. E. church of Tiffin, who I advised to go on to select the fixtures for the church, he will give you full description of it, would like to go to Bergmans to see the different styles of chandeliers, brackets and swell lamps.

Yours Respt.
S. C. Walker

Material for Pole line

→ Tiffin O ←

70 Poles 41'-0" total length 6 x 8" top

160 Cross Arms

430 { ✓ 300 Insulators
✓ 400 Pins
✓ 300 Lag screws

421 { ✓ 30 Main and tie safety catches
✓ 9 Pressure safety catches
✓ 50 lbs #14 or 16 copper wire —

74 Poles	@ 4.50	333
74 " Setting	@ 2.50	185.00
74 " Tamping and Forming	@ 1.00	74.00
104 Cross arms	@ .75	78.00
574 Insulators	@ .10	57.40
320 Lag screws and washers	@ .06	19.20
Stringing 5 3/4 miles Main Feeder	@ 25	143.75
" 3/4 " Possum	@ .10	32.25
36 Main and Feeder S.C	@ 3.00	108.00
12 Possum S.C	@ 1.00	12
50 Junction clamps	@ 2.00	100
Painting		111
9 Guy poles	3.00	27
9 " " setting	@ 2.50	22.50
Incidentals		100

5600 Cha Copper

$220.

68506.61
34143.45
3436

2969.10
1485.50
1484.50
2969.10
4453.55.50
2969.10
3414.40

76

Campbell

Washington St (1883)
Market
Madison
Monroe
alley
alley
alley
alley
$3000
$2000

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END

69

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18 June 1981

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A SELECTIVE MICROFILM EDITION

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(1879–1886)

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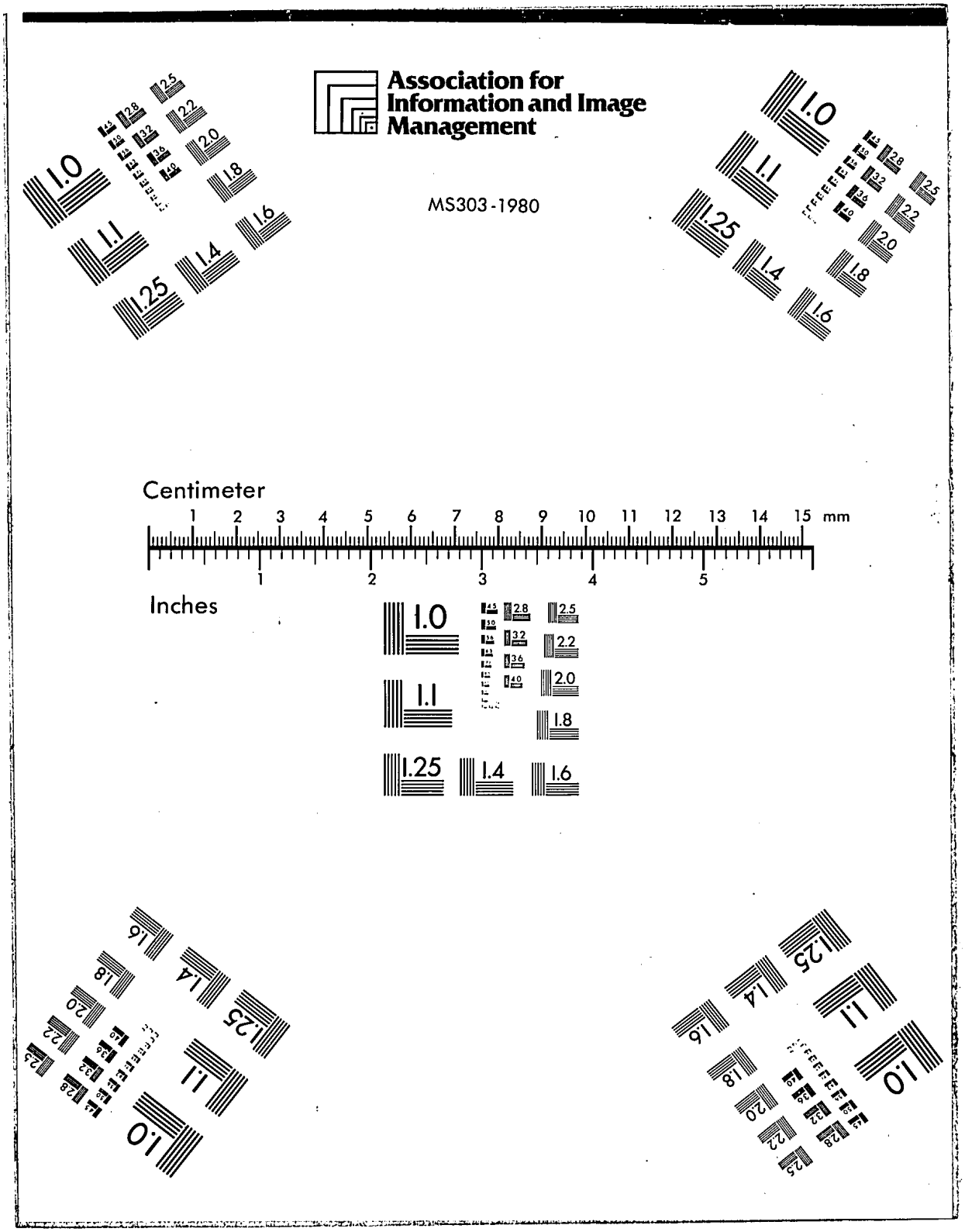
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